Report
North Lateral Storm Drain System
Evaluation of Potential Sources
North Boeing Field
Seattle, Washington

October 13, 2010

Prepared for

The Boeing Company

LANDAU ASSOCIATES
130 2nd Avenue South
Edmonds, WA 98020
(425) 778-0907

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1.0 INTRODUCTION

This report documents North Lateral Source Evaluation (NLSE) activities performed in the North Lateral drainage area at North Boeing Field (NBF) in Seattle, Washington. NBF is located east of East Marginal Way South, adjacent to the K*ing County Airport and the City of Seattle Georgetown Steam Plant (GTSP) (Figure 1). The NLSE was conducted by The Boeing Company (Boeing). Activities described in this report began in July 2010 and were completed in August 2010. The objective of the NLSE activities was to identify areas for additional sampling of materials at NBF based on concentrations of polychlorinated biphenyls (PCBs) and metals found in storm drain structures above their preliminary screening levels, and to collect samples of media from those identified areas. Investigation results and sampling activities described in this report were performed in accordance with the *North Lateral Storm Drain System Evaluation of Potential Sources Work Plan, North Boeing Field, Seattle, Washington* (Work Plan, Landau Associates 2010).

The Work Plan was reviewed and approved by the Washington State Department of Ecology (Ecology) under an Agreed Order between Ecology, Boeing, the City of Seattle, and King County. The purpose of the NLSE was to identify areas in the NBF North Lateral storm drain that may warrant further investigation and sampling based on concentrations of PCBs and metals identified during the most recent storm drain sampling event. Source investigations focused on the North Lateral storm drain area because PCB concentrations in this area have historically been above screening levels. Based on the results of the NLSE, additional focused source investigation activities will take place throughout the remaining NBF storm drain laterals as discussed in Section 5.0.

2.0 SAMPLE AREAS AND COLLECTION PROCEDURES

This section describes the areas of the NBF North Lateral drainage that were the focus for sampling activities based on the criteria established in the Work Plan. Materials that were sampled, along with the corresponding sample collection procedures, are also described in this section. Field inspection activities took place prior to sampling of any media to identify the media to sample.

2.1 SAMPLE AREAS

As described above, sample areas were identified based on PCB and metal concentrations in solid material collected from storm drain structures in March and April 2010. Field personnel were provided with the best available information on building construction dates to identify buildings constructed after 1980; buildings constructed after 1980 are assumed to not have PCB-containing materials. Field personnel inspected areas around each building listed below even if the building construction date was known to be post-1980. In some cases, other building areas adjacent to or near the buildings listed below were also inspected and sampled. The complete explanation of sample areas for each sample location is provided in Table 1.

The following areas were evaluated for the presence of potentially PCB- or metal-containing materials:

- Areas surrounding the 3-302 building
- Areas surrounding the 3-310 Building
- Areas surrounding the 3-315 building
- Areas surrounding the 3-322 building
- Areas surrounding the 3-323 building
- Areas surrounding the 3-324 building
- Areas surrounding the 3-326 building
- Areas surrounding the 3-333 building
- Areas surrounding the 3-334 building
- Areas surrounding the 3-335 building
- Areas surrounding the 3-350 building
- Areas surrounding the 3-353 building
- Areas surrounding the 3-354 building
- Areas surrounding the 3-368 building
- Areas to the north of the 3-380 building
- Areas surrounding the 3-626 building
- Areas surrounding Substation 87.

2.2 SAMPLE COLLECTION PROCEDURES

Following inspection of the sample areas described in Section 2.1, samples were collected from media in each area as identified by field personnel. Sample materials included paint from building and equipment surfaces, caulk from windows and door jams, surface debris, concrete, asphalt, roofing materials, and other materials. Wipe samples were also collected from site features including building siding and equipment surfaces where collection of other sample media was not possible. Sample collection procedures for each type of media sampled during the NLSE are discussed in the sections below. Descriptions of samples collected and categorized according to the sample-type descriptions provided in the sections below are provided in Table 1. Decontamination procedures were performed in accordance with the Work Plan.

2.2.1 PAINT FROM BUILDING OR EQUIPMENT SURFACES

Paint from building or equipment surfaces was sampled following inspection by field personnel. Field personnel first identified areas where exterior building paint was peeling off from the surface based on the potential for the loose paint fragments to chip off and enter the storm drain system. If no chipping or peeling paint was observed, a representative paint sample of a building or structure was collected. Chipping or peeling paint from equipment surfaces such as evaporators or transformers was also sampled. Pieces of paint were removed from surfaces using a knife with a removable blade and wedged chisel. In many cases, paint samples were collected from multiple areas of a piece of equipment to allow for ample volume of sample. Field personnel attempted not to damage building siding or equipment surfaces. The pieces of paint were placed into an 8-oz. glass sample jar, labeled, and stored on ice. Blades used for removing paint were disposed of after completion of sampling at a specific sample location; chisel-type tools were decontaminated between each sample location.

2.2.2 CAULK FROM WINDOWS OR DOOR JAMS

Field personnel identified areas of caulk found on buildings constructed prior to 1980. Field personnel inspected caulking around window frames, door frames, and around exterior piping and vents and collected samples based on the availability of material at each building location. Caulk material was removed using a knife with a removable blade. The sharp end of the blade was used to cut out the caulk, and the caulk sample was placed into an 8-oz. glass sample jar, labeled, and stored on ice. Field personnel replaced all removed caulking with similar material to avoid compromising the integrity of the seals around the windows and doors of a building. Blades used for removing caulk material were either disposed of after use at a specific sample location, or decontaminated between each sample location.

2.2.3 SURFACE DEBRIS

Field personnel identified, inspected, and sampled selected areas where surface debris (e.g., soil, fine particulates, and organic debris) appeared likely to be transported to storm drain structures during rain events. Surface debris was swept together and collected using a new clean broom and/or a clean stainless-steel spoon. Surface debris was placed into 8-oz. glass sample jars, labeled, and stored on ice. Disposable sampling equipment (brooms, etc.) was discarded after use at a specific sample location. Other sampling equipment, such as stainless-steel spoons, was decontaminated between each sample location.

2.2.4 CONCRETE MATERIAL

Field personnel identified areas of concrete material that may have been, based on visual indications, stained from the presence of transformers or other equipment. Concrete material samples were collected as either bulk material samples or dust samples. Bulk material samples were collected, where possible, in locations where field personnel were able to loosen and remove pieces of concrete via sledge hammer, pry bar, knife, or other hand-held tool. Bulk concrete samples were loosened or chipped away, and the collected pieces were placed into an 8-oz. glass sample jar, labeled, and stored on ice. Hand-held tools were decontaminated between each sample location.

Concrete dust was collected from areas where concrete was not readily loosened and removed by hand, using the procedures described above. Field personnel drilled into the concrete with a roto-hammer type drill. The dust generated from drilling was collected with a clean, stainless-steel sampling spoon, placed into an 8-oz. glass sample jar, labeled, and stored on ice. Drill bits were decontaminated between each sample location.

2.2.5 ASPHALT MATERIAL

Field personnel identified areas of asphalt material that may have been, based on visual indications, stained from the presence of transformers or other equipment. Asphalt material (pavement, sealant, etc.) samples were collected as either bulk material samples or dust samples. Bulk material samples were collected, where possible, in locations where field personnel were able to loosen and remove pieces of asphalt via sledge hammer, pry bar, knife, or other hand-held tool. Bulk asphalt samples were loosened or chipped away, and the collected pieces were placed into an 8-oz glass sample jar, labeled, and stored on ice. Hand held tools were decontaminated between each sample location.

Asphalt dust was collected from areas where asphalt was not readily loosened and removed by hand, using the procedures described above. Field personnel drilled into the asphalt with a roto-hammer type drill. The dust generated from drilling was collected with a clean, stainless-steel sampling spoon, placed into an 8-oz glass sample jar, labeled, and stored on ice. Drill bits were decontaminated between each sample location.

2.2.6 ROOFING MATERIALS

Roofing material was sampled if identified by field personnel as potentially impacting or contributing PCBs to the storm drain system based on proximity to storm drain structures where PCBs or metals were found and the building was known to be constructed prior to 1980. Field personnel visually inspected rooftops to determine if the roofing material could be ruled out as a source of PCBs. The majority of building roofs that were inspected were covered with a white membrane roofing material, which was manufactured and installed post-1980, and were ruled out as potential sources of PCBs. It was also assumed that materials such as asphalt shingles or asphalt coatings were more likely to be a PCB source than paint or other roof coatings. Field personnel traced rooftop runoff to downspouts and connections to the storm drain lines. In the case that the building predated 1980 and PCBs were not ruled out otherwise, a rooftop runoff sample location was identified for PCB analysis. The rooftop runoff samples will be collected in accordance with the Work Plan during an upcoming rain event during the 4th quarter of 2010. Data from the rooftop runoff sampling will be reported to Ecology.

2.2.7 WIPE SAMPLES

Field personnel identified areas where staining, residue, or other indication of potential source contamination was observed. Wipe samples were collected from building siding and equipment surfaces. Wipe sample collection was performed in accordance with the Work Plan. Prior to collecting the wipe sample, an area 10 centimeters (cm) by 10 cm was isolated using a cardboard template. The sampler, wearing a clean pair of disposable sterile gloves, removed the laboratory-prepared wipe (i.e., sterile gauze pad soaked with hexane for the PCB wipe samples, dry sterile gauze pad for the metals wipe samples) from its packaging container and firmly wiped the marked surface area to collect a sample. The wipe sample was collected by wiping first in one direction and then again 90 degrees offset from the original wiping direction to optimize sample collection coverage. After the sample was collected, the gauze was placed in an 8-oz. glass sample jar, labeled, and stored on ice.

2.2.8 OTHER MATERIALS

Samples of other materials not otherwise specified in Sections 2.2.1 through 2.2.7 were collected using appropriate sampling techniques that were identified in the field based on the type of material. Other materials included solid samples and one liquid sample that was collected (MAT18, collected around the base of building 3-346). Solids samples were collected into 8-oz glass sample jars, labeled, and stored on ice. The liquid sample was collected using a clean pipette to collect the liquid and transferred to a 500-milliliter (mL) sample bottle, labeled, and stored on ice.

3.0 SAMPLE DOCUMENTATION AND ANALYSIS

A complete record of all field activities was maintained during field inspection and field sampling events. Documentation included field logbooks, field sampling forms, photographs, sample labels, and chain-of-custody forms. Sample locations were recorded on field maps and marked in the field with paint for later identification. In addition, sample locations were photo-documented prior to and during sampling. Samples collected from locations that could not be easily marked with paint (i.e., equipment surfaces) were clearly documented on field maps and photographs of the sampling location were taken.

Samples were transported to Analytical Resources, Inc., (ARI) of Tukwila, Washington, within 24 hours of sample collection. Samples were analyzed for PCB aroclors by U.S. Environmental Protection Agency (EPA) Method 8082. Samples were also analyzed for metals (arsenic, cadmium, chromium, copper, lead, mercury, silver, and zinc) using EPA Method 7471A for mercury and 6010B for the other metals. Sample material remaining after all analyses were performed was archived at ARI. Archived samples were frozen and will be stored at the laboratory, ARI, for one year. Analyses were conducted on a standard turnaround time. All samples submitted for analysis were accompanied by a chain-of-custody form.

4.0 INVESTIGATION RESULTS

All samples were analyzed for PCBs and metals, with the exception of 13 paint chip samples, one surface debris sample, and one other material sample that were collected for further evaluation of PCB concentrations after receipt of the initial data reports. All sample locations are shown on Figure 2. Analytical results for PCBs are provided on Figures 3 and 4. Analytical results for arsenic are provided on Figures 5 and 6, cadmium on Figures 7 and 8, chromium on Figures 9 and 10, copper on Figures 11 and 12, lead on Figures 13 and 14, mercury on Figures 15 and 16, silver on Figures 17 and 18, and zinc on Figures 19 and 20. Laboratory analytical reports are provided in Appendix A. Analytical data is summarized in Tables 2, 3, and 4.

The number of samples collected from each type of sample media is listed below:

- 77 paint chip samples, plus one duplicate paint chip sample collected at sample location PAINT74
- 13 caulk samples
- 23 surface debris samples
- 9 concrete samples
- 8 asphalt samples
- 4 roof material samples
- 17 wipe samples
- 21 other material samples (including 20 solids material samples and 1 liquid material sample).

All of the samples listed above were analyzed for PCBs. PCB results by sample type are summarized on Table 5. Total PCBs were not detected in any of the 17 wipe samples collected. Of the 154 solids samples collected (which includes all of the paint chip, caulk, surface debris, concrete, asphalt, roof material, and the 20 other material solid samples), PCBs were not detected in 83 samples (53.5 percent of the total solids samples collected). Total PCBs were detected at concentrations above the detection limit, to concentrations less than 50 milligrams per kilogram (mg/kg) at 62 sample locations (27 paint chip samples, 18 surface debris samples, 1 caulk sample, 3 concrete samples, 7 asphalt samples, 1 roof sample, and 5 other material samples; 40 percent of the total solids samples collected); and total PCBs were detected at a concentration of greater than or equal to 50 mg/kg at 9 sample locations (7 paint chip samples, 1 caulk sample, and 1 other material sample; 6.5 percent of the total solids samples collected). PCBs were not detected in the one liquid sample collected (MAT18). Overall, PCBs were most frequently detected in sample media located near or on buildings that were constructed prior to 1980. No specific visual indication or definitive trend for identifying media with PCBs (i.e., paint color,

type of caulk) was identified based on the results of the NLSE. As discussed above, this data is presented in full on Figures 3 and 4 and in Tables 2, 3, and 4; PCB results are summarized in Table 5.

Metals were detected at various concentrations throughout the sample areas depending on the properties of the material from which the sample was collected. Of the wipe samples, chromium and lead were the most frequently detected metals, and silver and arsenic were the least frequently detected. Of the solids samples, zinc and copper were the most frequently detected metals, and silver and arsenic were the least frequently detected. Low levels of cadmium, copper, silver, and zinc were detected in the one liquid sample (MAT18). As discussed above, this data is presented on Figures 5 through 20, and in Tables 2, 3, and 4.

5.0 PLANNED FUTURE ACTIVITIES

Boeing is developing an abatement program for the handling, treatment, removal, and disposal of materials identified during the NLSE as containing PCB or metals concentrations with a significant potential to impact or enter into the NBF storm drain system. As part of the abatement program, Boeing will develop procedures to identify other building materials similar to the ones described in the sections above. The material to be covered under the abatement program may not be limited to those locations listed in Table 1, and may include other similar building materials identified in the North Lateral and other areas of the NBF site. Additional sampling of building materials and additional focused source investigation activities may take place throughout the remaining NBF storm drain laterals as Boeing continues to characterize materials for abatement. Specific abatement procedures for paint and other materials are currently in development. Abatement activities will not compromise the integrity of the building structures on which the material is present. Rooftop runoff samples will be collected during a rain event in the 4th quarter of 2010. Data from the rooftop runoff sampling will be reported to Ecology.

6.0 USE OF THIS REPORT

This report has been prepared for the exclusive use of The Boeing Company and applicable regulatory agencies for specific application to the NBF locality. No other party is entitled to rely on the information and recommendations included in this document without the express written consent of Landau Associates. Further, the reuse of information and recommendations provided herein for extensions of the project or for any other project, without review and authorization by Landau Associates, shall be at the user's sole risk. Landau Associates warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. We make no other warranty, either express or implied.

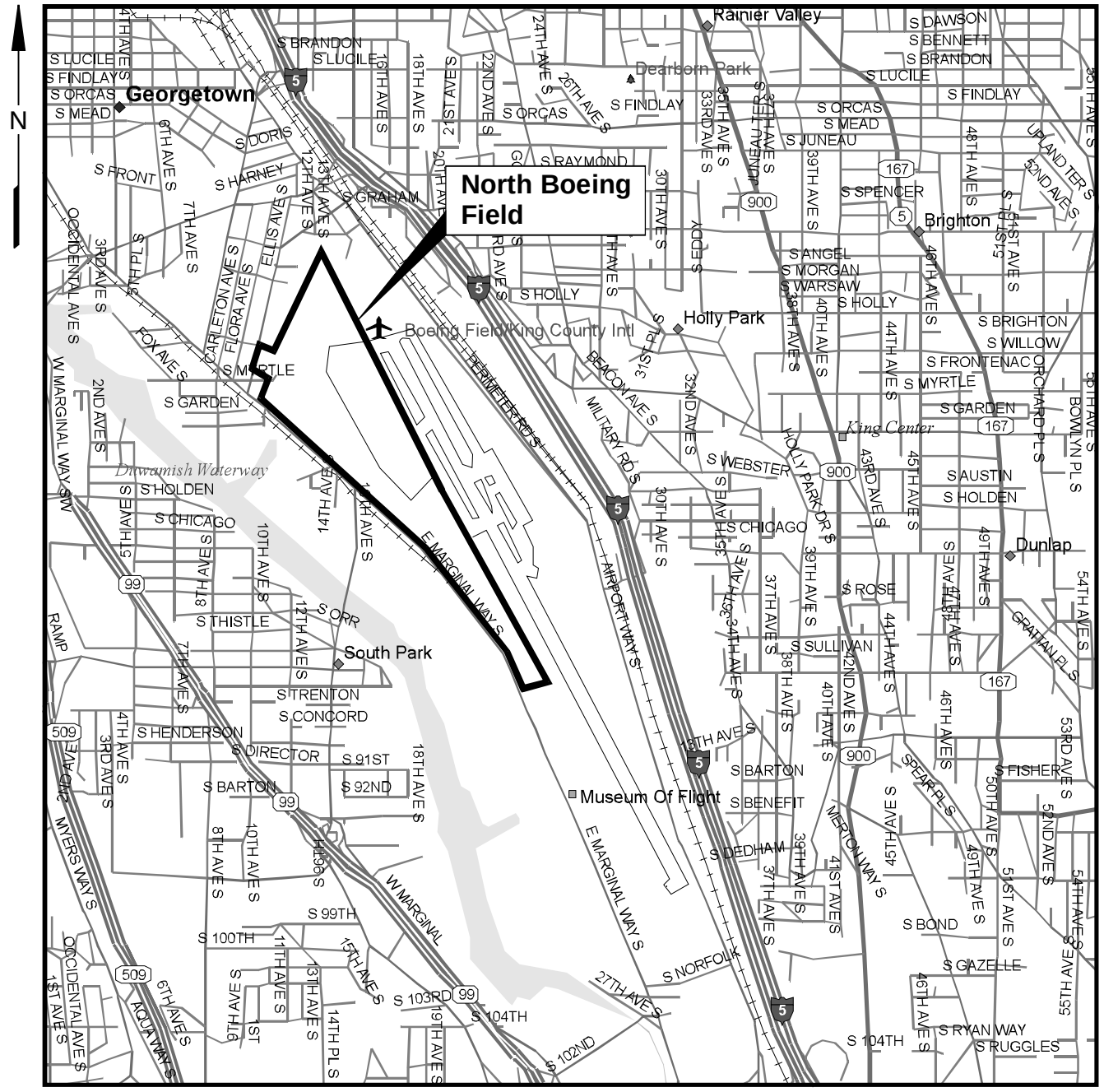
This document has been prepared under the supervision and direction of the following key staff.

LANDAU ASSOCIATES, INC.

Colette M. Griffith
Senior Staff Engineer

Kristy J. Hendrickson, P.E.
Principal

CMG/KJH/tam



Flume Realignment| V:\025\0821210.001\SD Structure & Surface Investigation\Figure 1.cdr 6/16/2010

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North Boeing Field Seattle, Washington	**Vicinity Map**	Figure 1

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\Revised\Fig2-PCB_All.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

Legend

- Sample Location
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 110 220

Scale in Feet

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

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North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
All Sample Locations

Figure
2

NLS-PAINT36
7/26/2010
PCB, total <0.8

NLS-PAINT37
7/26/2010
PCB, total 4.9

NLS-PAINT35
7/26/2010
PCB, total <0.8

NLS-PAINT39
7/26/2010
PCB, total 3.3

NLS-PAINT43
7/28/2010
PCB, total <0.79

NLS-PAINT86
8/25/2010
PCB, total 22.6

NLS-PAINT38
7/26/2010
PCB, total 750

NLS-PAINT75
8/25/2010
PCB, total 5.3

NLS-PAINT42
7/28/2010
PCB, total 25.5

NLS-PAINT41
7/28/2010
PCB, total 6.4

NLS-PAINT04
7/20/2010
PCB, total <0.79

NLS-PAINT01
7/20/2010
PCB, total <0.8

NLS-PAINT76
8/3/2010
PCB, total <0.79

NLS-PAINT34
7/26/2010
PCB, total <0.79

NLS-PAINT85
8/3/2010
PCB, total <1.1

NLS-PAINT79
8/3/2010
PCB, total 1.7

NLS-PAINT44
7/29/2010
PCB, total <0.8

NLS-PAINT33
7/26/2010
PCB, total <0.8

NLS-PAINT62
7/28/2010
PCB, total <0.8

NLS-PAINT45
7/29/2010
PCB, total <0.79

NLS-PAINT56
7/30/2010
PCB, total <0.48

NLS-PAINT59
7/28/2010
PCB, total <0.79

NLS-PAINT61
7/28/2010
PCB, total 136

NLS-PAINT72
7/30/2010
PCB, total <0.8

NLS-PAINT17
7/22/2010
PCB, total 9.4

NLS-PAINT15
7/22/2010
PCB, total 2.6

NLS-PAINT82
8/4/2010
PCB, total 1.1

NLS-PAINT83
8/4/2010
PCB, total 46

NLS-PAINT55
7/30/2010
PCB, total <0.39

NLS-PAINT60
7/28/2010
PCB, total 98

NLS-PAINT64
7/29/2010
PCB, total 8.6

NLS-PAINT66
7/28/2010
PCB, total 12.1

NLS-PAINT57
7/30/2010
PCB, total <0.54

NLS-PAINT18
7/22/2010
PCB, total 16.9

NLS-PAINT16
7/22/2010
PCB, total <0.79

NLS-PAINT65
7/28/2010
PCB, total 250

NLS-PAINT71
7/29/2010
PCB, total <0.8

NLS-PAINT53
7/30/2010
PCB, total <0.6

NLS-PAINT68
7/29/2010
PCB, total 5.9

NLS-PAINT78
8/3/2010
PCB, total <1

NLS-PAINT73
7/30/2010
PCB, total <0.8

NLS-PAINT20
7/26/2010
PCB, total 1.4

NLS-PAINT70
7/29/2010
PCB, total 160

NLS-PAINT47
7/29/2010
PCB, total <0.8

NLS-PAINT52
7/30/2010
PCB, total <0.69

NLS-PAINT51
7/30/2010
PCB, total <0.53

NLS-PAINT11
7/21/2010
PCB, total <0.8

NLS-PAINT08
7/20/2010
PCB, total 1700

NLS-PAINT74
8/3/2010
PCB, total 2300
8/25/2010
PCB, total 1900

NLS-PAINT10
7/21/2010
PCB, total <0.8

NLS-PAINT06
7/20/2010
PCB, total <0.8

NLS-PAINT27
7/28/2010
PCB, total 30

NLS-PAINT48
7/30/2010
PCB, total <0.52

NLS-PAINT58
7/30/2010
PCB, total 17.3

NLS-PAINT50
7/30/2010
PCB, total <0.77

NLS-PAINT13
7/22/2010
PCB, total <0.8

NLS-PAINT31
7/28/2010
PCB, total 6.6

NLS-PAINT49
7/30/2010
PCB, total <0.65

NLS-PAINT77
8/3/2010
PCB, total <0.8

NLS-PAINT19
7/26/2010
PCB, total 5.4

NLS-PAINT32
7/28/2010
PCB, total 4.5

NLS-PAINT84
8/4/2010
PCB, total <0.79

NLS-PAINT80
8/4/2010
PCB, total 4.6

NLS-PAINT29
7/28/2010
PCB, total 27

NLS-PAINT28
7/28/2010
PCB, total 4.4

NLS-PAINT24
7/26/2010
PCB, total 2.4

NLS-PAINT09
7/21/2010
PCB, total <0.8

NLS-PAINT05
7/20/2010
PCB, total 2.4

NLS-PAINT14
7/22/2010
PCB, total <0.79

NLS-PAINT12
7/22/2010
PCB, total <0.78

NLS-PAINT07
7/20/2010
PCB, total <0.79

NLS-PAINT25
7/26/2010
PCB, total <0.79

NLS-PAINT23
7/26/2010
PCB, total <0.8

NLS-PAINT21
7/26/2010
PCB, total <0.79

NLS-PAINT22
7/26/2010
PCB, total 5.77

NLS-PAINT03
7/20/2010
PCB, total <0.8

NLS-PAINT81
8/4/2010
PCB, total <0.79

Substation 87

3-324
3-335
3-333
3-334
3-626
3-322
3-350
3-365
3-315
3-353
3-380
3-313

Legend

- Paint Sample Locations - PCBs Not Detected
- Paint Sample Locations - PCB Result ≤ 10 mg/kg
- Paint Sample Locations - 10 mg/kg < PCB Result < 50 mg/kg
- Paint Sample Locations - PCB Result ≥ 50 mg/kg
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 110 220
Scale in Feet

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

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North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
Total PCBs in Paint Samples

Figure
3

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\Revised\Fig3-PCBPaint.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

Legend

- Other Material Sample Locations - PCBs Not Detected
- Other Material Sample Locations - PCB Result ≤ 10 mg/kg
- Other Material Sample Locations - 10 mg/kg < PCB Result < 50 mg/kg
- Other Material Sample Locations - PCB Result ≥ 50 mg/kg
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 110 220

Scale in Feet

Note

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North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
Total PCB Results in
Other Material Samples

Figure
4

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\RevisedFig4-PCBOther.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\RevisedFig5 - ArsenicPaint.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

Legend

- Paint Sample Locations - Arsenic Not Detected
- Paint Sample Locations - Arsenic Detected
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 100 200

Scale in Feet

Note

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North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
Arsenic in Paint Samples

Figure
5

NLS-CONC09
7/26/2010
Arsenic <10

NLS-ASP02
7/26/2010
Arsenic <10

NLS-WIPE03
7/21/2010
Arsenic <5

NLS-WIPE05
7/21/2010
Arsenic <5

NLS-WIPE02
7/21/2010
Arsenic <5

NLS-MAT10
7/30/2010
Arsenic <10

NLS-SURFACE22
8/2/2010
Arsenic <20

NLS-MAT18
7/30/2010
Arsenic <0.05

NLS-WIPE15
7/21/2010
Arsenic <5

NLS-SURFACE01
7/20/2010
Arsenic <10

NLS-WIPE01
7/21/2010
Arsenic <5

NLS-ASP03
7/20/2010
Arsenic <5

NLS-SURFACE17
8/2/2010
Arsenic <5

3-333

NLS-CAULK12
7/28/2010
Arsenic <50

NLS-WIPE14
7/21/2010
Arsenic <5

3-323

NLS-ASP06
7/28/2010
Arsenic <5

NLS-WIPE16
7/21/2010
Arsenic <5

NLS-SURFACE18
8/2/2010
Arsenic <5

Substation 87

NLS-SURFACE21
8/2/2010
Arsenic <10

NLS-CONC04
7/26/2010
Arsenic <30

NLS-CONC06
7/20/2010
Arsenic 50

NLS-SURFACE19
8/2/2010
Arsenic <5

NLS-SURFACE16
8/2/2010
Arsenic <5

3-334

NLS-CAULK17
7/28/2010
Arsenic <5

NLS-ROOF20
7/29/2010
Arsenic 40

3-335

NLS-WIPE04
7/21/2010
Arsenic 6

NLS-WIPE07
7/21/2010
Arsenic <5

NLS-WIPE18
7/21/2010
Arsenic <5

NLS-MAT19
7/20/2010
Arsenic <180

NLS-MAT14
7/30/2010
Arsenic <5

NLS-MAT17
7/29/2010
Arsenic 295

3-324

NLS-MAT20
7/21/2010
Arsenic <50

NLS-CONC07
7/29/2010
Arsenic 30

NLS-SURFACE06
7/29/2010
Arsenic 6

NLS-SURFACE15
8/2/2010
Arsenic <30

NLS-MAT05
7/22/2010
Arsenic <5

NLS-WIPE08
7/21/2010
Arsenic <5

3-626

NLS-WIPE17
7/21/2010
Arsenic <5

NLS-CAULK19
7/29/2010
Arsenic <20

NLS-CAULK20
7/29/2010
Arsenic 53

NLS-SURFACE20
8/2/2010
Arsenic <10

NLS-MAT03
7/21/2010
Arsenic <10

NLS-SURFACE05
7/22/2010
Arsenic 5

NLS-ROOF18
7/29/2010
Arsenic <5

NLS-MAT21
7/22/2010
Arsenic <5

NLS-SURFACE13
8/2/2010
Arsenic <10

NLS-MAT12
7/30/2010
Arsenic 7

NLS-ASP04
7/30/2010
Arsenic <5

NLS-ASP05
7/30/2010
Arsenic <5

NLS-CAULK03
7/21/2010
Arsenic <20

NLS-MAT06
7/22/2010
Arsenic <10

NLS-ROOF08
7/28/2010
Arsenic <10

NLS-ASP07
7/29/2010
Arsenic 10

NLS-MAT15
7/30/2010
Arsenic <9

NLS-SURFACE07
7/29/2010
Arsenic <10

NLS-SURFACE08
7/29/2010
Arsenic <120

NLS-MAT13
7/30/2010
Arsenic <5

NLS-CAULK16
7/30/2010
Arsenic <10

NLS-ROOF05
7/21/2010
Arsenic 23

NLS-SURFACE09
8/2/2010
Arsenic <50

NLS-SURFACE11
8/2/2010
Arsenic 80

NLS-ASP01
7/22/2010
Arsenic <5

NLS-MAT16
7/29/2010
Arsenic <250

3-350

3-365

NLS-MAT04
7/21/2010
Arsenic 79

NLS-ASP08
8/2/2010
Arsenic <5

3-315

NLS-CAULK22
7/29/2010
Arsenic <50

NLS-CAULK14
7/29/2010
Arsenic <50

NLS-SURFACE04
7/20/2010
Arsenic <10

NLS-CAULK11
7/28/2010
Arsenic <10

NLS-CONC02
7/28/2010
Arsenic 20

NLS-SURFACE12
8/2/2010
Arsenic 30

NLS-CAULK04
7/22/2010
Arsenic <50

NLS-CONC10
8/2/2010
Arsenic <10

NLS-SURFACE10
8/2/2010
Arsenic <10

NLS-CONC03
7/28/2010
Arsenic 20

NLS-MAT01
7/21/2010
Arsenic <20

NLS-MAT02
7/21/2010
Arsenic <20

NLS-CAULK01
7/21/2010
Arsenic <10

NLS-CAULK10
7/28/2010
Arsenic <10

NLS-WIPE13
7/21/2010
Arsenic <5

NLS-WIPE11
7/21/2010
Arsenic <5

NLS-CAULK02
7/21/2010
Arsenic <20

NLS-SURFACE14
8/2/2010
Arsenic <10

NLS-CONC08
7/20/2010
Arsenic <20

NLS-SURFACE02
7/20/2010
Arsenic 6

NLS-WIPE10
7/21/2010
Arsenic <5

NLS-MAT22
7/28/2010
Arsenic 22

NLS-MAT08
7/26/2010
Arsenic <240

NLS-SURFACE03
7/20/2010
Arsenic 16

NLS-CONC01
7/20/2010
Arsenic <10

NLS-WIPE09
7/21/2010
Arsenic <5

NLS-MAT09
7/28/2010
Arsenic 63

NLS-WIPE12
7/21/2010
Arsenic <5

3-380

3-313

Legend

- Other Material Samples Locations - Arsenic Not Detected
- Other Material Samples Locations - Arsenic Detected
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 100 200

Scale in Feet

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
Arsenic in Other Material Samples

Figure
6

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\RevisedFig6 - ArsenicOther.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

Legend

- Paint Sample Locations - Cadmium Not Detected
- Paint Sample Locations - Cadmium Detected
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 100 200

Scale in Feet

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
Cadmium in Paint Samples

Figure
7

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\Revised\Fig7 - CadPaint.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

NLS-CONC09
7/26/2010
Cadmium 1.1

NLS-ASP02
7/26/2010
Cadmium 0.7

NLS-WIPE03
7/21/2010
Cadmium <0.2

NLS-WIPE05
7/21/2010
Cadmium <0.2

NLS-WIPE02
7/21/2010
Cadmium <0.2

NLS-WIPE01
7/21/2010
Cadmium <0.2

NLS-SURFACE22
8/2/2010
Cadmium <1

NLS-MAT10
7/30/2010
Cadmium 0.6

NLS-SURFACE01
7/20/2010
Cadmium 10.5

NLS-ASP03
7/20/2010
Cadmium 0.5

NLS-MAT18
7/30/2010
Cadmium 0.003

NLS-WIPE15
7/21/2010
Cadmium 0.9

NLS-CAULK12
7/28/2010
Cadmium <2

NLS-WIPE14
7/21/2010
Cadmium <0.2

NLS-SURFACE17
8/2/2010
Cadmium 0.6

NLS-SURFACE18
8/2/2010
Cadmium 0.7

NLS-CONC06
7/20/2010
Cadmium 1.3

NLS-SURFACE21
8/2/2010
Cadmium 6.3

NLS-SURFACE19
8/2/2010
Cadmium 0.8

NLS-SURFACE16
8/2/2010
Cadmium 3.1

NLS-CONC04
7/26/2010
Cadmium 5

NLS-ASP06
7/28/2010
Cadmium 3.7

NLS-WIPE16
7/21/2010
Cadmium 0.5

NLS-CAULK17
7/28/2010
Cadmium <0.2

NLS-WIPE17
7/21/2010
Cadmium 0.4

NLS-WIPE04
7/21/2010
Cadmium 44

NLS-MAT19
7/20/2010
Cadmium 30

NLS-ROOF20
7/29/2010
Cadmium <0.5

NLS-WIPE18
7/21/2010
Cadmium 0.3

NLS-MAT20
7/21/2010
Cadmium 7

NLS-SURFACE06
7/29/2010
Cadmium 1.9

NLS-MAT21
7/22/2010
Cadmium <0.2

NLS-MAT14
7/30/2010
Cadmium 2.7

NLS-MAT17
7/29/2010
Cadmium 0.5

NLS-WIPE08
7/21/2010
Cadmium 0.3

NLS-WIPE07
7/21/2010
Cadmium <0.2

NLS-SURFACE20
8/2/2010
Cadmium 2.6

NLS-CAULK19
7/29/2010
Cadmium <1

NLS-SURFACE05
7/22/2010
Cadmium 7.4

NLS-CAULK20
7/29/2010
Cadmium 10.7

NLS-CONC07
7/29/2010
Cadmium 1.2

NLS-ASP05
7/30/2010
Cadmium 1.8

NLS-MAT05
7/22/2010
Cadmium 1.1

NLS-SURFACE09
8/2/2010
Cadmium 33

NLS-MAT06
7/22/2010
Cadmium 1.5

NLS-ROOF18
7/29/2010
Cadmium <0.2

NLS-ASP07
7/29/2010
Cadmium 19.1

NLS-SURFACE13
8/2/2010
Cadmium 11.7

NLS-MAT12
7/30/2010
Cadmium 1.9

NLS-ASP01
7/22/2010
Cadmium 1.4

NLS-SURFACE07
7/29/2010
Cadmium 1.8

NLS-CAULK16
7/30/2010
Cadmium <0.5

NLS-ASP04
7/30/2010
Cadmium 0.4

NLS-ROOF05
7/21/2010
Cadmium 12

NLS-MAT03
7/21/2010
Cadmium 12.1

NLS-SURFACE15
8/2/2010
Cadmium 17

NLS-SURFACE04
7/20/2010
Cadmium 2.6

NLS-SURFACE12
8/2/2010
Cadmium 30

NLS-MAT15
7/30/2010
Cadmium <0.4

NLS-CAULK03
7/21/2010
Cadmium 106

NLS-ASP08
8/2/2010
Cadmium 1

NLS-CAULK10
7/28/2010
Cadmium <0.5

NLS-SURFACE08
7/29/2010
Cadmium 7

NLS-MAT13
7/30/2010
Cadmium 2

NLS-CAULK14
7/29/2010
Cadmium <2

NLS-CONC02
7/28/2010
Cadmium 31.9

NLS-MAT04
7/21/2010
Cadmium <0.2

NLS-CONC10
8/2/2010
Cadmium 2.5

NLS-CONC08
7/20/2010
Cadmium <1

NLS-CONC03
7/28/2010
Cadmium 3.4

NLS-CAULK01
7/21/2010
Cadmium <0.5

NLS-MAT16
7/29/2010
Cadmium <10

NLS-CAULK11
7/28/2010
Cadmium 1

NLS-CAULK04
7/22/2010
Cadmium <2

NLS-MAT01
7/21/2010
Cadmium 6

NLS-MAT02
7/21/2010
Cadmium 1

NLS-CAULK02
7/21/2010
Cadmium <0.9

NLS-WIPE11
7/21/2010
Cadmium 1.4

NLS-CAULK22
7/29/2010
Cadmium <2

NLS-SURFACE10
8/2/2010
Cadmium 2.6

NLS-SURFACE14
8/2/2010
Cadmium 5.1

NLS-WIPE10
7/21/2010
Cadmium <0.2

NLS-MAT08
7/26/2010
Cadmium <9

NLS-WIPE12
7/21/2010
Cadmium <0.2

NLS-SURFACE02
7/20/2010
Cadmium 33.6

NLS-SURFACE03
7/20/2010
Cadmium 12.8

NLS-CONC01
7/20/2010
Cadmium 7.8

NLS-WIPE09
7/21/2010
Cadmium <0.2

NLS-WIPE13
7/21/2010
Cadmium <0.2

NLS-ROOF08
7/28/2010
Cadmium <0.5

NLS-SURFACE11
8/2/2010
Cadmium 15.3

NLS-MAT09
7/28/2010
Cadmium 0.2

NLS-MAT22
7/28/2010
Cadmium 0.4

Substation 87

3-324

3-333

3-335

3-323

3-315

3-350

3-365

3-380

Legend

- Other Material Sample Locations - Cadmium Not Detected
- Other Material Sample Locations - Cadmium Detected
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 100 200

Scale in Feet

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
Cadmium in Other Material Samples

Figure
8

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\RevisedFig8 - CadOther.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

NLS-PAINT36
7/26/2010
Chromium 2130

NLS-PAINT37
7/26/2010
Chromium 14.5

NLS-PAINT35
7/26/2010
Chromium 2

NLS-PAINT01
7/20/2010
Chromium 16

NLS-PAINT38
7/26/2010
Chromium 27500

NLS-PAINT04
7/20/2010
Chromium 70

NLS-PAINT39
7/26/2010
Chromium 2440

NLS-PAINT43
7/28/2010
Chromium 7540

NLS-PAINT42
7/28/2010
Chromium 830

NLS-PAINT44
7/29/2010
Chromium 40

NLS-PAINT34
7/26/2010
Chromium 11

NLS-PAINT41
7/28/2010
Chromium 45.8

Substation 87

NLS-PAINT62
7/28/2010
Chromium 50

NLS-PAINT61
7/28/2010
Chromium 1130

NLS-PAINT33
7/26/2010
Chromium 17600

NLS-PAINT59
7/28/2010
Chromium 160

NLS-PAINT45
7/29/2010
Chromium 617

NLS-PAINT60
7/28/2010
Chromium 259

NLS-PAINT56
7/30/2010
Chromium 9

NLS-PAINT17
7/22/2010
Chromium 49.8

NLS-PAINT64
7/29/2010
Chromium 126

NLS-PAINT72
7/30/2010
Chromium 360

NLS-PAINT15
7/22/2010
Chromium 1300

NLS-PAINT18
7/22/2010
Chromium 84

NLS-PAINT65
7/28/2010
Chromium 8.2

NLS-PAINT66
7/28/2010
Chromium 170

NLS-PAINT55
7/30/2010
Chromium 98.6

NLS-PAINT16
7/22/2010
Chromium 2150

NLS-PAINT68
7/29/2010
Chromium 1630

NLS-PAINT53
7/30/2010
Chromium 3280

NLS-PAINT57
7/30/2010
Chromium 1110

NLS-PAINT71
7/29/2010
Chromium 66

NLS-PAINT29
7/28/2010
Chromium 4490

NLS-PAINT70
7/29/2010
Chromium 16.5

NLS-PAINT52
7/30/2010
Chromium 148

NLS-PAINT58
7/30/2010
Chromium 225

NLS-PAINT50
7/30/2010
Chromium 8

NLS-PAINT73
7/30/2010
Chromium 7280

NLS-PAINT11
7/21/2010
Chromium 100

NLS-PAINT08
7/20/2010
Chromium 35600

NLS-PAINT06
7/20/2010
Chromium 2850

NLS-PAINT28
7/28/2010
Chromium 8890

NLS-PAINT47
7/29/2010
Chromium 598

NLS-PAINT12
7/22/2010
Chromium 24.7

NLS-PAINT20
7/26/2010
Chromium 442

NLS-PAINT27
7/28/2010
Chromium 6920

NLS-PAINT48
7/30/2010
Chromium 50

NLS-PAINT51
7/30/2010
Chromium 39

NLS-PAINT10
7/21/2010
Chromium 610

NLS-PAINT49
7/30/2010
Chromium 116

NLS-PAINT13
7/22/2010
Chromium 10700

NLS-PAINT19
7/26/2010
Chromium 9

NLS-PAINT31
7/28/2010
Chromium 647

NLS-PAINT84
8/4/2010
Chromium 6

NLS-PAINT09
7/21/2010
Chromium 1080

NLS-PAINT32
7/28/2010
Chromium 8940

NLS-PAINT14
7/22/2010
Chromium 4120

NLS-PAINT07
7/20/2010
Chromium 60

NLS-PAINT22
7/26/2010
Chromium 133

NLS-PAINT24
7/26/2010
Chromium 20400

NLS-PAINT05
7/20/2010
Chromium 29.4

NLS-PAINT21
7/26/2010
Chromium 460

NLS-PAINT23
7/26/2010
Chromium 289

NLS-PAINT25
7/26/2010
Chromium 21.9

NLS-PAINT03
7/20/2010
Chromium 6.5

3-333
3-335
3-324
3-334
3-626
3-306
3-322
3-315
3-350
3-365
3-368
3-353
3-380
3-313

Legend

- Paint Sample Locations - Chromium Detected
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 100 200

Scale in Feet

Note
1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
Chromium in Paint Samples

Figure
9

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\Revised\Fig9 - ChromPaint.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

NLS-CONC09
7/26/2010
Chromium 32

NLS-ASP02
7/26/2010
Chromium 28

NLS-WIPE03
7/21/2010
Chromium <0.5

NLS-WIPE02
7/21/2010
Chromium 0.9

NLS-WIPE01
7/21/2010
Chromium 0.5

NLS-WIPE05
7/21/2010
Chromium 0.9

NLS-MAT10
7/30/2010
Chromium 7

NLS-SURFACE22
8/2/2010
Chromium 38

NLS-MAT18
7/30/2010
Chromium <0.005

NLS-ASP03
7/20/2010
Chromium 25.6

NLS-SURFACE01
7/20/2010
Chromium 489

NLS-SURFACE17
8/2/2010
Chromium 20.1

NLS-CAULK12
7/28/2010
Chromium 21

NLS-WIPE14
7/21/2010
Chromium 1.5

NLS-SURFACE18
8/2/2010
Chromium 28.5

NLS-WIPE15
7/21/2010
Chromium 10.2

NLS-CONC06
7/20/2010
Chromium 41

Substation 87

NLS-SURFACE21
8/2/2010
Chromium 68

NLS-CONC04
7/26/2010
Chromium 43

NLS-WIPE16
7/21/2010
Chromium 7.6

NLS-SURFACE19
8/2/2010
Chromium 25.6

NLS-SURFACE16
8/2/2010
Chromium 66.9

NLS-MAT20
7/21/2010
Chromium 212

NLS-ASP06
7/28/2010
Chromium 27.7

NLS-CAULK17
7/28/2010
Chromium 1

NLS-WIPE04
7/21/2010
Chromium 33.1

NLS-WIPE18
7/21/2010
Chromium 4.1

NLS-WIPE17
7/21/2010
Chromium 18.4

NLS-MAT19
7/20/2010
Chromium 190

NLS-ROOF20
7/29/2010
Chromium 88

NLS-SURFACE06
7/29/2010
Chromium 28.1

NLS-CONC07
7/29/2010
Chromium 38

NLS-WIPE08
7/21/2010
Chromium 0.7

NLS-WIPE07
7/21/2010
Chromium <0.5

NLS-MAT21
7/22/2010
Chromium 0.6

NLS-MAT14
7/30/2010
Chromium 19.1

NLS-MAT17
7/29/2010
Chromium 280

NLS-SURFACE20
8/2/2010
Chromium 75

NLS-SURFACE15
8/2/2010
Chromium 232

NLS-SURFACE05
7/22/2010
Chromium 51.5

NLS-SURFACE09
8/2/2010
Chromium 446

NLS-CAULK19
7/29/2010
Chromium <2

NLS-CAULK20
7/29/2010
Chromium 155

NLS-ASP05
7/30/2010
Chromium 32.9

NLS-MAT05
7/22/2010
Chromium 10.6

NLS-ROOF18
7/29/2010
Chromium 2.7

NLS-SURFACE13
8/2/2010
Chromium 93

NLS-MAT12
7/30/2010
Chromium 121

NLS-CAULK03
7/21/2010
Chromium <2

NLS-MAT06
7/22/2010
Chromium 7

NLS-ASP07
7/29/2010
Chromium 43

NLS-MAT15
7/30/2010
Chromium 4.8

NLS-SURFACE07
7/29/2010
Chromium 35

NLS-CAULK16
7/30/2010
Chromium 29

NLS-MAT03
7/21/2010
Chromium 3

NLS-CONC10
8/2/2010
Chromium 34

NLS-SURFACE04
7/20/2010
Chromium 232

NLS-MAT22
7/28/2010
Chromium 16

NLS-ASP01
7/22/2010
Chromium 24.8

NLS-SURFACE08
7/29/2010
Chromium 250

NLS-MAT13
7/30/2010
Chromium 10

NLS-ASP04
7/30/2010
Chromium 24.4

NLS-ROOF05
7/21/2010
Chromium 307

NLS-SURFACE11
8/2/2010
Chromium 236

NLS-MAT16
7/29/2010
Chromium 180

NLS-MAT04
7/21/2010
Chromium 107

NLS-ASP08
8/2/2010
Chromium 32.2

NLS-CAULK22
7/29/2010
Chromium <5

NLS-CAULK04
7/22/2010
Chromium <5

NLS-CAULK11
7/28/2010
Chromium <1

NLS-CAULK14
7/29/2010
Chromium <5

NLS-MAT01
7/21/2010
Chromium 103

NLS-SURFACE10
8/2/2010
Chromium 51

NLS-SURFACE12
8/2/2010
Chromium 142

NLS-CAULK10
7/28/2010
Chromium 92

NLS-CONC02
7/28/2010
Chromium 32

NLS-CAULK01
7/21/2010
Chromium 7

NLS-SURFACE02
7/20/2010
Chromium 90.9

NLS-MAT02
7/21/2010
Chromium 12

NLS-WIPE10
7/21/2010
Chromium 0.5

NLS-WIPE11
7/21/2010
Chromium 5.3

NLS-CAULK02
7/21/2010
Chromium <2

NLS-SURFACE14
8/2/2010
Chromium 81

NLS-CONC08
7/20/2010
Chromium 46

NLS-WIPE09
7/21/2010
Chromium <0.5

NLS-WIPE12
7/21/2010
Chromium 1.4

NLS-WIPE13
7/21/2010
Chromium 8.1

NLS-CONC03
7/28/2010
Chromium 41

NLS-SURFACE03
7/20/2010
Chromium 371

NLS-CONC01
7/20/2010
Chromium 38

NLS-MAT09
7/28/2010
Chromium 117

NLS-ROOF08
7/28/2010
Chromium 93

NLS-MAT08
7/26/2010
Chromium 130

3-333
3-323
3-324
3-335
3-626
3-322
3-365
3-350
3-315
3-353
3-380
3-313

Legend

- Other Material Sample Locations - Chromium Not Detected
- Other Material Sample Locations - Chromium Detected
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 100 200

Scale in Feet

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
Chromium in Other Material Samples

Figure
10

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\Revised\Fig10 - ChromOther.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\Revised\Fig11 - CopperPaint.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

Legend

- Paint Sample Locations - Copper Detected
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 100 200

Scale in Feet

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
Copper in Paint Samples

Figure
11

Legend

- Paint Sample Locations - Copper Detected
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 100 200

Scale in Feet

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

North Boeing Field
Seattle, Washington

North Lateral Source Evaluation Copper in Paint Samples

Figure 12

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\Revised\Fig12 - CopperPaint.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

NLS-PAINT36
7/26/2010
Lead 500

NLS-PAINT37
7/26/2010
Lead 83

NLS-PAINT35
7/26/2010
Lead 601

NLS-PAINT38
7/26/2010
Lead 54700

NLS-PAINT39
7/26/2010
Lead 32700

NLS-PAINT43
7/28/2010
Lead 830

NLS-PAINT41
7/28/2010
Lead 201

NLS-PAINT62
7/28/2010
Lead 140

NLS-PAINT61
7/28/2010
Lead 3210

NLS-PAINT64
7/29/2010
Lead 1710

NLS-PAINT66
7/28/2010
Lead 519

NLS-PAINT71
7/29/2010
Lead 16

NLS-PAINT70
7/29/2010
Lead 109

NLS-PAINT28
7/28/2010
Lead 18200

NLS-PAINT27
7/28/2010
Lead 16600

NLS-PAINT31
7/28/2010
Lead 230

NLS-PAINT32
7/28/2010
Lead 139

NLS-PAINT24
7/26/2010
Lead 43400

NLS-PAINT25
7/26/2010
Lead 54

NLS-PAINT23
7/26/2010
Lead 970

NLS-PAINT22
7/26/2010
Lead 1770

NLS-PAINT42
7/28/2010
Lead 1520

NLS-PAINT59
7/28/2010
Lead <50

NLS-PAINT60
7/28/2010
Lead 11500

NLS-PAINT65
7/28/2010
Lead 70

NLS-PAINT68
7/29/2010
Lead 5070

NLS-PAINT29
7/28/2010
Lead 27000

NLS-PAINT20
7/26/2010
Lead 1520

NLS-PAINT19
7/26/2010
Lead 34

NLS-PAINT21
7/26/2010
Lead 350

NLS-PAINT01
7/20/2010
Lead 271

NLS-PAINT04
7/20/2010
Lead <50

NLS-PAINT34
7/26/2010
Lead 21

NLS-PAINT33
7/26/2010
Lead 35900

NLS-PAINT17
7/22/2010
Lead 338

NLS-PAINT18
7/22/2010
Lead 444

NLS-PAINT15
7/22/2010
Lead 1150

NLS-PAINT16
7/22/2010
Lead <50

NLS-PAINT73
7/30/2010
Lead 9580

NLS-PAINT11
7/21/2010
Lead 170

NLS-PAINT08
7/20/2010
Lead 58600

NLS-PAINT06
7/20/2010
Lead 11400

NLS-PAINT10
7/21/2010
Lead 1400

NLS-PAINT09
7/21/2010
Lead 13400

NLS-PAINT12
7/22/2010
Lead 30

NLS-PAINT07
7/20/2010
Lead 110

NLS-PAINT13
7/22/2010
Lead 31000

NLS-PAINT14
7/22/2010
Lead 16600

NLS-PAINT03
7/20/2010
Lead 9

NLS-PAINT05
7/20/2010
Lead 13600

NLS-PAINT44
7/29/2010
Lead <50

NLS-PAINT45
7/29/2010
Lead 2640

NLS-PAINT56
7/30/2010
Lead 21

NLS-PAINT72
7/30/2010
Lead 370

NLS-PAINT53
7/30/2010
Lead 11100

NLS-PAINT55
7/30/2010
Lead 1570

NLS-PAINT52
7/30/2010
Lead 5330

NLS-PAINT57
7/30/2010
Lead 10600

NLS-PAINT47
7/29/2010
Lead 1920

NLS-PAINT50
7/30/2010
Lead 26

NLS-PAINT58
7/30/2010
Lead 21800

NLS-PAINT48
7/30/2010
Lead <50

NLS-PAINT51
7/30/2010
Lead 20

NLS-PAINT49
7/30/2010
Lead 12400

NLS-PAINT84
8/4/2010
Lead <5

Substation 87

3-333

3-323

3-334

3-335

3-324

3-626

3-322

3-306

3-315

3-368

3-353

3-350

3-365

3-380

3-313

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\RevisedFig13 - LeadPaint.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

Legend

- Paint Sample Locations - Lead Not Detected
- Paint Sample Locations - Lead Detected
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 100 200

Scale in Feet

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
Lead in Paint Samples

Figure
13

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\RevisedFig14 - LeadOther.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

Legend

- Other Material Sample Locations - Lead Not Detected
- Other Material Sample Locations - Lead Detected
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 100 200

Scale in Feet

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
Lead in Other Material Samples

Figure
14

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\Revised\Fig15 - MercuryPaint.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

Legend

- Paint Sample Locations - Mercury Not Detected
- Paint Sample Locations - Mercury Detected
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 100 200

Scale in Feet

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
Mercury in Paint Samples

Figure
15

Legend

- Other Material Sample Locations - Mercury Not Detected
- Other Material Sample Locations - Mercury Detected
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 100 200

Scale in Feet

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
Mercury in Other Material Samples

Figure
16

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\Revised\Fig16 - MercuryOther.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\RevisedFig17 - SilverPaint.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

Legend

- Paint Sample Locations - Silver Not Detected
- Paint Sample Locations - Silver Detected
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 100 200

Scale in Feet

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
Silver in Paint Samples

Figure
17

NLS-CONC09 7/26/2010 Silver <0.8
NLS-ASP02 7/26/2010 Silver <0.7
NLS-WIPE03 7/21/2010 Silver <0.3
NLS-WIPE02 7/21/2010 Silver <0.3
NLS-WIPE05 7/21/2010 Silver <0.3
NLS-SURFACE01 7/20/2010 Silver <0.8
NLS-WIPE01 7/21/2010 Silver <0.3
NLS-SURFACE22 8/2/2010 Silver <1
NLS-MAT10 7/30/2010 Silver <0.6
NLS-MAT18 7/30/2010 Silver 0.012
NLS-ASP03 7/20/2010 Silver <0.3
NLS-CAULK12 7/28/2010 Silver <3
NLS-WIPE15 7/21/2010 Silver <0.3
NLS-SURFACE17 8/2/2010 Silver <0.3
NLS-SURFACE18 8/2/2010 Silver <0.3
NLS-CONC06 7/20/2010 Silver <0.8
NLS-WIPE14 7/21/2010 Silver <0.3
NLS-SURFACE21 8/2/2010 Silver 1.1
NLS-CONC04 7/26/2010 Silver <2
NLS-SURFACE19 8/2/2010 Silver <0.3
NLS-SURFACE16 8/2/2010 Silver <0.3
NLS-WIPE16 7/21/2010 Silver <0.3
NLS-WIPE17 7/21/2010 Silver <0.3
NLS-WIPE04 7/21/2010 Silver 46.9
NLS-ASP06 7/28/2010 Silver <0.3
NLS-CAULK17 7/28/2010 Silver <0.3
NLS-ROOF20 7/29/2010 Silver <0.7
NLS-SURFACE06 7/29/2010 Silver <0.3
NLS-WIPE07 7/21/2010 Silver <0.3
NLS-WIPE18 7/21/2010 Silver <0.3
NLS-MAT20 7/21/2010 Silver <3
NLS-CONC07 7/29/2010 Silver <0.8
NLS-MAT19 7/20/2010 Silver <10
NLS-WIPE08 7/21/2010 Silver <0.3
NLS-SURFACE05 7/22/2010 Silver <0.3
NLS-MAT14 7/30/2010 Silver <0.3
NLS-MAT17 7/29/2010 Silver <0.3
NLS-MAT21 7/22/2010 Silver <0.3
NLS-CAULK19 7/29/2010 Silver <1
NLS-SURFACE20 8/2/2010 Silver <0.7
NLS-MAT12 7/30/2010 Silver <0.3
NLS-MAT06 7/22/2010 Silver <0.7
NLS-MAT05 7/22/2010 Silver <0.3
NLS-CAULK20 7/29/2010 Silver <0.3
NLS-ASP05 7/30/2010 Silver <0.3
NLS-SURFACE09 8/2/2010 Silver <3
NLS-CAULK10 7/28/2010 Silver <0.7
NLS-ROOF18 7/29/2010 Silver <0.3
NLS-ASP01 7/22/2010 Silver <0.3
NLS-ASP07 7/29/2010 Silver <0.7
NLS-SURFACE07 7/29/2010 Silver <0.7
NLS-MAT13 7/30/2010 Silver <0.3
NLS-CAULK16 7/30/2010 Silver <0.7
NLS-ASP04 7/30/2010 Silver <0.3
NLS-CAULK03 7/21/2010 Silver <1
NLS-SURFACE15 8/2/2010 Silver <2
NLS-ASP08 8/2/2010 Silver <0.3
NLS-SURFACE11 8/2/2010 Silver <0.8
NLS-SURFACE13 8/2/2010 Silver <0.8
NLS-CAULK11 7/28/2010 Silver <0.7
NLS-MAT15 7/30/2010 Silver <0.6
NLS-ROOF05 7/21/2010 Silver 0.9
NLS-CONC10 8/2/2010 Silver 1.8
NLS-SURFACE10 8/2/2010 Silver <0.7
NLS-MAT03 7/21/2010 Silver <0.7
NLS-SURFACE12 8/2/2010 Silver <2
NLS-SURFACE08 7/29/2010 Silver <7
NLS-MAT04 7/21/2010 Silver <0.3
NLS-MAT09 7/28/2010 Silver <0.3
NLS-MAT16 7/29/2010 Silver <10
NLS-CAULK04 7/22/2010 Silver <3
NLS-MAT01 7/21/2010 Silver <1
NLS-SURFACE04 7/20/2010 Silver 1.7
NLS-CONC02 7/28/2010 Silver <0.8
NLS-CONC03 7/28/2010 Silver <0.7
NLS-CAULK22 7/29/2010 Silver <3
NLS-CAULK01 7/21/2010 Silver <0.7
NLS-WIPE10 7/21/2010 Silver <0.3
NLS-WIPE11 7/21/2010 Silver 0.3
NLS-MAT02 7/21/2010 Silver <1
NLS-CONC08 7/20/2010 Silver <1
NLS-WIPE13 7/21/2010 Silver <0.3
NLS-MAT08 7/26/2010 Silver <10
NLS-SURFACE02 7/20/2010 Silver <0.3
NLS-WIPE09 7/21/2010 Silver <0.3
NLS-WIPE12 7/21/2010 Silver <0.3
NLS-CAULK02 7/21/2010 Silver <1
NLS-SURFACE14 8/2/2010 Silver <0.7
NLS-ROOF08 7/28/2010 Silver <0.7
NLS-SURFACE03 7/20/2010 Silver <0.3
NLS-CONC01 7/20/2010 Silver <0.8
NLS-MAT22 7/28/2010 Silver <0.3

Substation 87
3-333
3-323
3-335
3-324
3-626
3-315
3-365
3-350
3-353
3-380
3-313

Legend

- Other Material Sample Locations - Silver Not Detected
- Other Material Sample Locations - Silver Detected
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 100 200
Scale in Feet

Note
1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
Silver in Other Material Samples

Figure 18

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\Revised\Fig18 - SilverOther.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

NLS-PAINT44
7/29/2010
Zinc 270

NLS-PAINT45
7/29/2010
Zinc 5540

NLS-PAINT55
7/30/2010
Zinc 11

NLS-PAINT56
7/30/2010
Zinc 275

NLS-PAINT72
7/30/2010
Zinc 1040

NLS-PAINT53
7/30/2010
Zinc 3620

NLS-PAINT52
7/30/2010
Zinc 4340

NLS-PAINT57
7/30/2010
Zinc 30100

NLS-PAINT50
7/30/2010
Zinc 363

NLS-PAINT47
7/29/2010
Zinc 4770

NLS-PAINT48
7/30/2010
Zinc 620

NLS-PAINT58
7/30/2010
Zinc 18600

NLS-PAINT49
7/30/2010
Zinc 17500

NLS-PAINT84
8/4/2010
Zinc 316

NLS-PAINT51
7/30/2010
Zinc 2760

NLS-PAINT04
7/20/2010
Zinc 5950

NLS-PAINT01
7/20/2010
Zinc 15500

NLS-PAINT13
7/22/2010
Zinc 288

NLS-PAINT10
7/21/2010
Zinc 1730

NLS-PAINT12
7/22/2010
Zinc 222

NLS-PAINT14
7/22/2010
Zinc 264

NLS-PAINT09
7/21/2010
Zinc 240

NLS-PAINT73
7/30/2010
Zinc 539

NLS-PAINT11
7/21/2010
Zinc 410

NLS-PAINT08
7/20/2010
Zinc 943

NLS-PAINT05
7/20/2010
Zinc 2440

NLS-PAINT03
7/20/2010
Zinc 147

NLS-PAINT15
7/22/2010
Zinc 3400

NLS-PAINT16
7/22/2010
Zinc 6990

NLS-PAINT33
7/26/2010
Zinc 13900

NLS-PAINT17
7/22/2010
Zinc 3030

NLS-PAINT18
7/22/2010
Zinc 1870

NLS-PAINT06
7/20/2010
Zinc 1670

NLS-PAINT07
7/20/2010
Zinc 123000

NLS-PAINT38
7/26/2010
Zinc 885

NLS-PAINT39
7/26/2010
Zinc 4440

NLS-PAINT34
7/26/2010
Zinc 1400

NLS-PAINT42
7/28/2010
Zinc 2840

NLS-PAINT59
7/28/2010
Zinc 750

NLS-PAINT20
7/26/2010
Zinc 1880

NLS-PAINT19
7/26/2010
Zinc 124

NLS-PAINT22
7/26/2010
Zinc 5580

NLS-PAINT21
7/26/2010
Zinc 530

NLS-PAINT68
7/29/2010
Zinc 6600

NLS-PAINT65
7/28/2010
Zinc 195

NLS-PAINT60
7/28/2010
Zinc 19500

NLS-PAINT37
7/26/2010
Zinc 2090

NLS-PAINT36
7/26/2010
Zinc 9500

NLS-PAINT35
7/26/2010
Zinc 12700

NLS-PAINT43
7/28/2010
Zinc 17800

NLS-PAINT41
7/28/2010
Zinc 1120

NLS-PAINT62
7/28/2010
Zinc 34200

NLS-PAINT61
7/28/2010
Zinc 5460

NLS-PAINT64
7/29/2010
Zinc 8510

NLS-PAINT66
7/28/2010
Zinc 2780

NLS-PAINT70
7/29/2010
Zinc 3610

NLS-PAINT71
7/29/2010
Zinc 2890

NLS-PAINT28
7/28/2010
Zinc 6760

NLS-PAINT31
7/28/2010
Zinc 28600

NLS-PAINT32
7/28/2010
Zinc 11100

NLS-PAINT27
7/28/2010
Zinc 5760

NLS-PAINT29
7/28/2010
Zinc 3520

NLS-PAINT24
7/26/2010
Zinc 12100

NLS-PAINT25
7/26/2010
Zinc 7300

NLS-PAINT23
7/26/2010
Zinc 458

3-324
3-335
3-333
3-323
3-334
3-626
3-306
3-322
3-315
3-368
3-353
3-313
3-354
3-350
3-365
3-380

Legend

- Paint Sample Locations - Zinc Detected
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 100 200

Scale in Feet

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
Zinc in Paint Samples

Figure
19

Y:\Projects\025082\MapDocs\NBF Source Evaluation Figures\RevisedFig19 - ZincPaint.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

NLS-CONC09
7/26/2010
Zinc 226

NLS-ASP02
7/26/2010
Zinc 94

NLS-WIPE03
7/21/2010
Zinc <5

NLS-WIPE02
7/21/2010
Zinc <10

NLS-WIPE01
7/21/2010
Zinc <6

NLS-WIPE05
7/21/2010
Zinc <7

NLS-SURFACE01
7/20/2010
Zinc 1260

NLS-SURFACE22
8/2/2010
Zinc 103

NLS-MAT10
7/30/2010
Zinc 200

NLS-MAT18
7/30/2010
Zinc 0.17

NLS-WIPE15
7/21/2010
Zinc 2160

NLS-ASP03
7/20/2010
Zinc 78.1

NLS-SURFACE17
8/2/2010
Zinc 288

NLS-SURFACE18
8/2/2010
Zinc 2050

Substation 87

3-333

NLS-CAULK12
7/28/2010
Zinc 235

3-323

NLS-WIPE14
7/21/2010
Zinc <6

NLS-SURFACE21
8/2/2010
Zinc 1610

NLS-ASP06
7/28/2010
Zinc 154

NLS-CONC06
7/20/2010
Zinc 478

NLS-SURFACE19
8/2/2010
Zinc 453

NLS-WIPE18
7/21/2010
Zinc <18

NLS-WIPE17
7/21/2010
Zinc 73

NLS-CONC04
7/26/2010
Zinc 467

3-334

NLS-WIPE16
7/21/2010
Zinc 1730

NLS-WIPE04
7/21/2010
Zinc 1120

NLS-SURFACE16
8/2/2010
Zinc 2060

NLS-MAT20
7/21/2010
Zinc 5150

NLS-ROOF20
7/29/2010
Zinc 75

NLS-CAULK17
7/28/2010
Zinc 24.5

3-324

NLS-WIPE07
7/21/2010
Zinc <6

NLS-SURFACE06
7/29/2010
Zinc 315

NLS-WIPE08
7/21/2010
Zinc 349

NLS-SURFACE05
7/22/2010
Zinc 326

NLS-CONC07
7/29/2010
Zinc 1050

NLS-MAT19
7/20/2010
Zinc 9190

NLS-MAT14
7/30/2010
Zinc 8600

NLS-MAT05
7/22/2010
Zinc 116

NLS-MAT21
7/22/2010
Zinc 8

NLS-MAT17
7/29/2010
Zinc 1150

NLS-SURFACE20
8/2/2010
Zinc 560

NLS-SURFACE09
8/2/2010
Zinc 2540

NLS-MAT06
7/22/2010
Zinc 21100

NLS-CAULK19
7/29/2010
Zinc 7

NLS-CAULK20
7/29/2010
Zinc 485

NLS-ASP04
7/30/2010
Zinc 54

NLS-ROOF18
7/29/2010
Zinc 50.7

3-322

NLS-MAT12
7/30/2010
Zinc 503

NLS-CAULK03
7/21/2010
Zinc 28

NLS-MAT03
7/21/2010
Zinc 13900

NLS-ASP07
7/29/2010
Zinc 147

NLS-SURFACE13
8/2/2010
Zinc 1050

NLS-SURFACE07
7/29/2010
Zinc 1210

NLS-MAT13
7/30/2010
Zinc 9070

NLS-CAULK16
7/30/2010
Zinc 213

NLS-ASP05
7/30/2010
Zinc 148

NLS-ROOF05
7/21/2010
Zinc 965

NLS-SURFACE15
8/2/2010
Zinc 904

NLS-SURFACE04
7/20/2010
Zinc 1020

NLS-CAULK11
7/28/2010
Zinc 12800

NLS-SURFACE12
8/2/2010
Zinc 2050

NLS-MAT15
7/30/2010
Zinc 27

3-365

3-350

NLS-MAT04
7/21/2010
Zinc 93

NLS-ASP08
8/2/2010
Zinc 330

NLS-CAULK10
7/28/2010
Zinc 13

NLS-CONC02
7/28/2010
Zinc 2140

NLS-SURFACE08
7/29/2010
Zinc 200

3-315

NLS-CAULK14
7/29/2010
Zinc 260

NLS-CAULK04
7/22/2010
Zinc 208

NLS-WIPE10
7/21/2010
Zinc 28

NLS-MAT16
7/29/2010
Zinc 850

NLS-CONC03
7/28/2010
Zinc 155

NLS-MAT01
7/21/2010
Zinc 1050

NLS-SURFACE10
8/2/2010
Zinc 437

NLS-WIPE09
7/21/2010
Zinc <6

NLS-ASP01
7/22/2010
Zinc 82

NLS-CAULK22
7/29/2010
Zinc 490

NLS-WIPE11
7/21/2010
Zinc 90

NLS-MAT02
7/21/2010
Zinc 23

NLS-CAULK02
7/21/2010
Zinc 8

NLS-CONC10
8/2/2010
Zinc 2130

NLS-CONC08
7/20/2010
Zinc 155

NLS-SURFACE11
8/2/2010
Zinc 2780

NLS-WIPE13
7/21/2010
Zinc 108

NLS-WIPE12
7/21/2010
Zinc <9

NLS-SURFACE02
7/20/2010
Zinc 1030

NLS-MAT08
7/26/2010
Zinc 2180

NLS-SURFACE03
7/20/2010
Zinc 934

NLS-CAULK01
7/21/2010
Zinc 11

NLS-CONC01
7/20/2010
Zinc 131

NLS-MAT09
7/28/2010
Zinc 213

NLS-ROOF08
7/28/2010
Zinc 232

NLS-SURFACE14
8/2/2010
Zinc 482

NLS-MAT22
7/28/2010
Zinc 255

3-380

3-313

Legend

- Other Material Samples - Zinc Not Detected
- Other Material Samples - Zinc Detected
- North Lateral
- North-Central Lateral
- Drainage from Building 3-380 Area
- Other lines
- Other structures
- Catch Basin
- Inlet
- Manhole
- Drain
- Drain Sump
- Sump

0 100 200

Scale in Feet

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

North Boeing Field
Seattle, Washington

North Lateral Source Evaluation
Zinc in Other Material Samples

Figure
20

Y:\Projects\025082\MapDocs\NBF Source Evaluation FiguresRevised\Fig20 - ZincOther.mxd 10/5/2010 NAD 1983 StatePlane Washington North FIPS 4601 Feet

TABLE 1
SAMPLE LOCATION NOTES
NORTH LATERAL SOURCE EVALUATION
NORTH BOEING FIELD

Sample Name	Sample Type	Date Sampled	Associated/Nearest Building Number	Sample Location Notes
NLS-ASP01-072210	Asphalt	7/22/2010	3-368/3-322	Collected from between Buildings 3-368 and 3-322, about 15 ft west of white fence. Asphalt looks old, stained.
NLS-ASP02-072610	Asphalt	7/26/2010	3-323	Collected northwest of curb-contained area north of Building 3-323. Stained asphalt.
NLS-ASP03-072010	Asphalt	7/20/2010	3-350	Collected near CB121B about 150 ft northwest of Building 3-350. Darker, cracking asphalt.
NLS-ASP04-073010	Asphalt	7/30/2010	3-350	Collected just northeast of the northeast corner of Building 3-350. Mildly stained asphalt near big asphalt patch (potential former transformer location).
NLS-ASP05-073010	Asphalt	7/30/2010	3-350	Collected near the northeast corner of Building 3-350. Mildly stained asphalt location near old pipe stub (potential former transformer location).
NLS-ASP06-072810	Asphalt	7/28/2010	3-302/3-332	Collected between Buildings 3-302 and 3-332, near CB-184B. Asphalt is stained green/red, staining likely from overhead pipes.
NLS-ASP07-072910	Asphalt	7/29/2010	3-326	Collected to the right of door W3 on the west side of Building 3-326. Asphalt is stained green/red/black, staining likely from overhead pipes, asphalt looks old.
NLS-ASP08-080210	Asphalt	8/2/2010	3-353	Collected 2 feet off the northwest corner of Building 3-353 underneath the glycol pipes.
NLS-CAULK01-072110	Caulk	7/21/2010	3-315	Collected from window seal between door N1 and the northwest corner of Building 3-315 and from the south side window on the southeast corner of Building 3-315.
NLS-CAULK02-072110	Caulk	7/21/2010	3-315	Collected from north wall concrete joint seam between door N1 and the northwest window of Building 3-315, composited with concrete joint seam on northeast corner of Building 3-315 near door E4.
NLS-CAULK03-072110	Caulk	7/21/2010	3-315	Collected from roof of Building 3-315 from concrete joint seams from two exposed wall joints.
NLS-CAULK04-072210	Caulk	7/22/2010	3-315	Collected from door caulk seams at doors S1 on south side of Building 3-315 and N1 on north side of 3-315.
NLS-CAULK10-072810	Caulk	7/28/2010	3-368	Collected from north wall concrete joint seam of Building 3-368.
NLS-CAULK11-072810	Caulk	7/28/2010	3-368	Collected from window seal on north wall of Building 3-368, west of door N1.
NLS-CAULK12-072810	Caulk	7/28/2010	3-323	Collected from door seal at door W1A of Building 3-323.
NLS-CAULK14-072910	Caulk	7/29/2010	3-365	Collected from window seal to left of door E1 on Building 3-365.
NLS-CAULK16-073010	Caulk	7/30/2010	3-350	Collected from roof of Building 3-350, from caulk on center vent, north side.
NLS-CAULK17-072810	Caulk	7/28/2010	3-332	Collected from east side of Building 3-332, collected from caulk around vent .
NLS-CAULK19-072910	Caulk	7/29/2010	3-322	Collected from east wall concrete joint seam on east side of Building 3-322, right of door E2A.
NLS-CAULK20-072910	Caulk	7/29/2010	3-326	Collected from window seal of window south of door E1 on Building 3-326.
NLS-CAULK22-072910	Caulk	7/29/2010	3-326	Collected from west wall concrete joint seams on west side of Building 3-326 between doors W1 and W2, and seam to the right of W3.
NLS-CONC01-072010	Concrete	7/20/2010	3-353/3-356	Collected from area between Buildings 3-353 and 3-356 with old concrete, used to store hydraulic jacks, concrete is old and crumbling.
NLS-CONC02-072810	Concrete	7/28/2010	3-368	Collected just to north of door E1 at Building 3-368 from below an old electrical panel box.
NLS-CONC03-072810	Concrete	7/28/2010	3-368	Collected from stained area north of wind tunnel area, concrete pad looks old, may have been site of old equipment based on presence of abandoned support structures.
NLS-CONC04-072610	Concrete	7/26/2010	3-310	Collected from old, stained concrete, east of door E1 of Building 3-310, along concrete support wall.
NLS-CONC06-072010	Concrete	7/20/2010	3-350	Collected from stain on concrete approximately 150 feet west of Building 3-350.
NLS-CONC07-072910	Concrete	7/29/2010	3-322	Collected from stained concrete just outside door W3 of Building 3-322.
NLS-CONC08-072010	Concrete	7/20/2010	3-353	Collected from dark stain on south wall of Building 3-353 between door S2 and SE corner of the building.
NLS-CONC09-072610	Concrete	7/26/2010	3-323	Collected near the northern edge of the property, north of Building 3-323, from rust stained concrete located beneath heat exchanger unit.
NLS-CONC10-080210	Concrete	8/2/2010	3-353	Collected from the concrete pad at the northwest corner of Building 3-353
NLS-MAT01-072110	Other Materials	7/21/2010	3-315	Collected from orange foam-like material found where pipe exits the east wall of the Building 3-315 corridor, approximately 2.5 feet above ground.
NLS-MAT02-072110	Other Materials	7/21/2010	3-315	Collected from black and white caulk-like material found on pipe that exits the east wall of the Building 3-315 corridor, material has the consistency of putty.
NLS-MAT03-072110	Other Materials	7/21/2010	3-315	Collected from the rubber weather stripping coming loose from the top left side of door E2 in the corridor on the east side of Building 3-315

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Sample Name	Sample Type	Date Sampled	Associated/Nearest Building Number	Sample Location Notes
NLS-MAT04-072110	Other Materials	7/21/2010	3-315	Collected from black coating material with silver tinsel-like material found on roof in middle section of Building 3-315.
NLS-MAT05-072210	Other Materials	7/22/2010	3-626	Collected from foam-like material on Building 3-626 located near bottom left corner of door W1.
NLS-MAT06-072210	Other Materials	7/22/2010	3-626	Collected from black foam squares found at base of Building 3-626, between doors S6 and S5.
NLS-MAT08-072610	Other Materials	7/26/2010	3-368	Collected from multi-colored material on base of metal structure between the main wind tunnel and the southern arm of the tunnel, near Building 3-368.
NLS-MAT09-072810	Other Materials	7/28/2010	3-368	Collected from black coating material with silver tinsel-like material found on lower roof of Building 3-368 covering electrical wire conduit.
NLS-MAT10-073010	Other Materials	7/30/2010	3-323	Collected from white pipe insulation material at northwest corner of Building 3-323. Insulation is very exposed at knee level.
NLS-MAT12-073010	Other Materials	7/30/2010	3-350	Collected from black coating material with silver tinsel-like material found on west edge of the roof of Building 3-350 covering electrical wire conduit.
NLS-MAT13-073010	Other Materials	7/30/2010	3-350	Collected from black roofing material (appears to be an old shingle) laying on roof of Building 3-350.
NLS-MAT14-073010	Other Materials	7/30/2010	3-326	Collected from pipe wrap/tape on pipes located on west wall of Building 3-326 between doors W4 and W5.
NLS-MAT15-073010	Other Materials	7/30/2010	3-326	Collected from orange foam-like material exposed on east wall of Building 3-326, left of door E4.
NLS-MAT16-072910	Other Materials	7/29/2010	3-326	Collected from rusted metal mesh material found on equipment located on southern end of the roof at Building 3-326.
NLS-MAT17-072910	Other Materials	7/29/2010	3-326	Collected from black coating material with silver tinsel-like material found on the roof of Building 3-326 covering electrical wire conduit.
NLS-MAT18-073010	Other Materials	7/30/2010	3-323/3-346	Collected from liquid that pools around the base of Building 3-346, just adjacent to Building 3-323.
NLS-MAT19-072010	Other Materials	7/20/2010	3-322/3-332	Collected from solids found inside the downspout drains on the southeast corner of the open air structure between Buildings 3-322 and 3-332.
NLS-MAT20-072110	Other Materials	7/21/2010	3-626	Collected from debris and organic material found along the base of the north side of the wet cell battery storage Building, east of Building 3-626
NLS-MAT21-072210	Other Materials	7/22/2010	3-322	Collected from black coal-like material found during Building 3-322 excavation, west of Building 3-322 approximately 5 feet north of the fuselage.
NLS-MAT22-072810	Other Materials	7/28/2010	3-368	Collected from solids found inside the downspout drains on the lower roof on the north side of Building 3-368.
NLS-MAT23-080410	Other Materials	8/4/2010	3-626	Collected from black foam material found at base of Building 3-626 just east of door S6 on south side of Building 3-326. Similar to MAT06 but with more rubber-like consistency,
NLS-PAINT01-072010	Paint Chips	7/20/2010	3-333	Collected from peeling yellow paint on bollards located north of Building 3-333, east of D333B.
NLS-PAINT03-072010	Paint Chips	7/20/2010	3-354	Collected from peeling paint on the north, west, and south walls of Building 3-354.
NLS-PAINT04-072010	Paint Chips	7/20/2010	3-333	Collected from peeling white paint on the mobile metal cart located outside door N3 on Building 3-333.
NLS-PAINT05-072010	Paint Chips	7/20/2010	3-380	Collected from peeling paint on the container located behind stall A-2, toward the blast wall from 3-380, peeling paint was present on the majority of the container.
NLS-PAINT06-072010	Paint Chips	7/20/2010	3-353	Collected from the orange paint sprayed on the asphalt near the northeast corner of Building 3-353.
NLS-PAINT07-072010	Paint Chips	7/20/2010	3-353/3-368	Collected from peeling white paint on the large white pipe near door E1 of Building 3-353 and the base of the pillar located across the street towards Building 3-368.
NLS-PAINT08-072010	Paint Chips	7/20/2010	3-353	Collected from peeling yellow paint on the yellow bollards located at the northwest corner of Building 3-353.
NLS-PAINT09-072110	Paint Chips	7/21/2010	3-315	Collected from peeling red paint on the metal tub skid located at the south side of Building 3-315, approximately 15 to 20 feet from the southeast corner of the Building.
NLS-PAINT10-072110	Paint Chips	7/21/2010	3-315	Collected from the peeling gray paint at the bottom of door E2 in the corridor of Building 3-315.
NLS-PAINT11-072110	Paint Chips	7/21/2010	3-315	Collected from the peeling gray paint at the edge of the corridor on the north side of Building 3-315.
NLS-PAINT12-072210	Paint Chips	7/22/2010	3-315	Collected from the gray Building siding paint between doors S3 and S4 on the south side of Building 3-315.
NLS-PAINT13-072210	Paint Chips	7/22/2010	3-315	Collected from the peeling yellow paint located at the eyewash station near door S1 on the south side of Building 3-315.
NLS-PAINT14-072210	Paint Chips	7/22/2010	3-342	Collected from the peeling yellow paint on bollards near CB133B on the south side of Building 3-342.

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Sample Name	Sample Type	Date Sampled	Associated/Nearest Building Number	Sample Location Notes
NLS-PAINT15-072210	Paint Chips	7/22/2010	3-626	Collected from the peeling paint on the white pipes and support structures/bases on the north side of Building 3-626 between doors N2 and N3.
NLS-PAINT16-072210	Paint Chips	7/22/2010	3-626	Collected from the light blue equipment along the north side of Building 3-626 between doors N3 and N4.
NLS-PAINT17-072210	Paint Chips	7/22/2010	3-626	Collected from the peeling white paint located at the foundation of Building 3-626, from area east of door N4; paint is peeling in some areas.
NLS-PAINT18-072210	Paint Chips	7/22/2010	3-626	Collected from the Building siding paint located on Building 3-626 where paint is peeling in some areas on the east side of the Building from door E1 to CB162; siding was later identified to be galbestos material.
NLS-PAINT19-072610	Paint Chips	7/26/2010	3-368	Collected from the peeling white paint on the Building siding to the right of door W1 on the west side of Building 3-368.
NLS-PAINT20-072610	Paint Chips	7/26/2010	3-368	Collected from the peeling gray paint on the railing and staircase structure to the left of door W2 on Building 3-368.
NLS-PAINT21-072610	Paint Chips	7/26/2010	3-368	Collected from the peeling silver paint on large metal ducting structure (on wheels) located to the south of the air intake on Building 3-368.
NLS-PAINT22-072610	Paint Chips	7/26/2010	3-368	Collected from peeling paint between the wind tunnel and Building 3-368, accessed from the south side of Building 3-368.
NLS-PAINT23-072610	Paint Chips	7/26/2010	3-368	Collected from the white metal supports on the side of Building 3-368.
NLS-PAINT24-072610	Paint Chips	7/26/2010	3-368	Collected from the orange bollards located behind the wind tunnel adjacent to Building 3-368 (layer of silver paint present beneath the orange).
NLS-PAINT25-072610	Paint Chips	7/26/2010	3-368	Collected from the painted metal siding of the tank control enclosure, located just southeast of the southeast corner of the wind tunnel adjacent to Building 3-368.
NLS-PAINT27-072810	Paint Chips	7/28/2010	3-368	Collected from the large green cylindrical tank north of the wind tunnel/Building 3-368.
NLS-PAINT28-072810	Paint Chips	7/28/2010	3-368	Collected from the large peach-colored cylindrical tank north of the wind tunnel/Building 3-368 near door E1.
NLS-PAINT29-072810	Paint Chips	7/28/2010	3-368	Collected from the large blue cylindrical tank north of the wind tunnel/Building 3-368 near door E1.
NLS-PAINT31-072810	Paint Chips	7/28/2010	3-368	Collected from the peeling white paint on the white container located north of the wind tunnel/Building 3-368.
NLS-PAINT32-072810	Paint Chips	7/28/2010	3-368	Collected from the legs of the blue roof enclosure located north of the wind tunnel/Building 3-368.
NLS-PAINT33-072610	Paint Chips	7/26/2010	3-333/3-310	Collected from the yellow-painted metal box along the fence of the fuel test area located east of Building 3-333 and west of Building 3-310.
NLS-PAINT34-072610	Paint Chips	7/26/2010	3-333	Collected from the white peeling paint on the metal beams located near the center of the enclosure of the fuel test area adjacent to Building 3-333.
NLS-PAINT35-072610	Paint Chips	7/26/2010	3-323	Collected from the red and white painted flood lights anchored in concrete blocks stored north of Building 3-323.
NLS-PAINT36-072610	Paint Chips	7/26/2010	3-323	Collected from the peeling paint on the switches/controls/gauges and their support structures located near the northern edge of Boeing's property, north of Building 3-323.
NLS-PAINT37-072610	Paint Chips	7/26/2010	3-323	Collected from a large, light green metal structure with peeling white paint located near the northern edge of Boeing's property, north of Building 3-323.
NLS-PAINT38-072610	Paint Chips	7/26/2010	3-323	Collected from the yellow bollards near the northwest corner of the cylinder tanks located just adjacent to Building 3-323.
NLS-PAINT39-072610	Paint Chips	7/26/2010	3-323	Collected from the white cylindrical tanks located on the west side of Building 3-323, sample collected from the peeling paint at the base of the tanks with multiple layers of paint.
NLS-PAINT41-072810	Paint Chips	7/28/2010	3-323	Collected from the light green painted Building cinder blocks on the east side of Building 3-323 to the left of door E2.
NLS-PAINT42-072810	Paint Chips	7/28/2010	3-323	Collected from the light green metal supports located near the southwest corner of Building 3-323 to the right of door W1A.
NLS-PAINT43-072810	Paint Chips	7/28/2010	3-323	Collected from the peeling paint on the red and black painted metal scaffolding located on the roof of Building 3-323.
NLS-PAINT44-072910	Paint Chips	7/29/2010	3-350	Collected from the peeling white, blue, and red painted tub skid located near CB10, west of Building 3-350.
NLS-PAINT45-072910	Paint Chips	7/29/2010	3-360	Collected from peeling yellow paint on the pile of yellow concrete wheel stops located in large storage lot in area of former Building 3-360.
NLS-PAINT47-072910	Paint Chips	7/29/2010	3-305	Collected from table with wheels with multiple layers of paint located on the west side of Building 3-305 west of door W1.

TABLE 1
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Sample Name	Sample Type	Date Sampled	Associated/Nearest Building Number	Sample Location Notes
NLS-PAINT48-073010	Paint Chips	7/30/2010	3-365	Collected from the off-white container located west of Building 3-365, sample collected from the west facing side of the container.
NLS-PAINT49-073010	Paint Chips	7/30/2010	3-365	Collected from the Building siding on the south side of Building 3-365.
NLS-PAINT50-073010	Paint Chips	7/30/2010	3-350	Collected from the brown painted sliding wood doors on the east side of Building 3-350, towards the northeast corner of the Building.
NLS-PAINT51-073010	Paint Chips	7/30/2010	3-350	Collected from peeling paint on the blast wall and the adjacent metal siding located east of the northeast corner of Building 3-350.
NLS-PAINT52-073010	Paint Chips	7/30/2010	3-350	Collected from the fire stand pipe near CB114 on the west side of Building 3-350.
NLS-PAINT53-073010	Paint Chips	7/30/2010	3-350	Collected from the green tub skid located near CB114 on the west side of Building 3-350.
NLS-PAINT55-073010	Paint Chips	7/30/2010	3-350	Collected from the light green shipping container located west of Building 3-350.
NLS-PAINT56-073010	Paint Chips	7/30/2010	3-350	Collected from the light grey shipping container located off the northwest corner of Building 3-350 (on the north side of the container, near the door).
NLS-PAINT57-073010	Paint Chips	7/30/2010	3-350	Collected from the metal container (white with blue doors) located to the left of door N4 on the north side of Building 3-350.
NLS-PAINT58-073010	Paint Chips	7/30/2010	3-350	Collected from peeling paint on the center vent on the north side of the roof of Building 3-350.
NLS-PAINT59-072810	Paint Chips	7/28/2010	3-334	Collected from the white paint on the support pillar base adjacent to door W1 on the west side of Building 3-334 (composite with similarly painted pillars in area).
NLS-PAINT60-072810	Paint Chips	7/28/2010	3-334	Collected from peeling white paint on the large tanks located at the southeast corner of building 3-334.
NLS-PAINT61-072810	Paint Chips	7/28/2010	3-334	Collected from peeling beige/green paint on the metal support pillar located at the southeast corner of Building 3-334 (composite with similarly painted beams in area).
NLS-PAINT62-072810	Paint Chips	7/28/2010	3-334	Collected from peeling silver paint on the evaporator units located east of Building 3-334 from the roof/upper areas of the structure (accessed via ladder).
NLS-PAINT64-072910	Paint Chips	7/29/2010	3-322/3-332	Collected from the peeling paint on the west side of the overhanging corrugated metal of the open-air structure located been Buildings 3-322 and 3-332.
NLS-PAINT65-072810	Paint Chips	7/28/2010	3-322	Collected from peeling paint on the Building siding paint located 12 feet east of the northwest corner of Building 3-322.
NLS-PAINT66-072810	Paint Chips	7/28/2010	3-322/3-326	Collected from the yellow metal support beams located between Buildings 3-322 and 3-326.
NLS-PAINT68-072910	Paint Chips	7/29/2010	3-322	Collected from the grey metal doors located at W1 and W3 on the west side of Building 3-322.
NLS-PAINT70-072910	Paint Chips	7/29/2010	3-322	Collected from the concrete wall on the north side of the roof of Building 3-322 (stained orange).
NLS-PAINT71-072910	Paint Chips	7/29/2010	3-326	Collected from the Building siding paint on the east wall of Building 3-326 near door S1.
NLS-PAINT72-073010	Paint Chips	7/30/2010	3-350	Collected from the red tub skids located near the northwest corner of Building 3-350.
NLS-PAINT73-073010	Paint Chips	7/30/2010	3-315/3-326	Composite sample collected from the red, white, blue tub skids located along the north wall of Building 3-315, left of door N4, and east of Building 3-326.
NLS-PAINT74-080310	Paint Chips	8/3/2010	3-326	Collected from yellow bollards with layers of yellow and white paint located near door W3 on the west side of Building 3-326.
NLS-PAINT75-080310	Paint Chips	8/3/2010	3-334/3-333	Collected from yellow bollards with layers of yellow and white paint located to the east of the fuel test area and D153C, directly west and across the road from Building 3-334.
NLS-PAINT76-080310	Paint Chips	8/3/2010	3-333	Collected from yellow bollards (only one layer of paint) on the west side of Building 3-333.
NLS-PAINT77-080310	Paint Chips	8/3/2010	3-342	Collected from yellow bollards with layers of yellow and white paint located on the southwest corner of the decant facility, adjacent to Building 3-342.
NLS-PAINT78-080310	Paint Chips	8/3/2010	3-315	Collected from yellow bollards with layers of yellow and white paint located on the northwest corner of Building 3-315.
NLS-PAINT79-080310	Paint Chips	8/3/2010	3-323/3-324	Collected from yellow bollards with layers of yellow and white paint located on the east side of Buildings 3-323 and 3-324 near the evaporators and CB182A.
NLS-PAINT80-080410	Paint Chips	8/4/2010	3-315	Collected from yellow bollards with layers of yellow and white paint near the southwest corner of Building 3-315 just west of door S1.
NLS-PAINT81-080410	Paint Chips	8/4/2010	3-313	Collected from yellow bollards with layers of yellow and white paint located near the west side of Building 3-313, directly west of the drum yard gate.

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Sample Name	Sample Type	Date Sampled	Associated/Nearest Building Number	Sample Location Notes
NLS-PAINT82-080410	Paint Chips	8/4/2010	3-302	Collected from the yellow bollards (only one layer of paint) on the north side of Building 3-302.
NLS-PAINT83-080410	Paint Chips	8/4/2010	3-365	Collected from yellow bollards with two layers of paint (light/dark yellow) located on the north side of the storage hangar located north of Building 3-365.
NLS-PAINT84-080410	Paint Chips	8/4/2010	3-350	Collected from the grey-brown paint on the hangar doors on the east side of Building 3-350.
NLS-PAINT85-082510	Paint Chips	8/25/2010	3-323	Collected from the northern section of the white cylinder tanks located to the west of Building 3-323 with multiple layers of paint (white, green, beige, and pink).
NLS-PAINT86-082510	Paint Chips	8/25/2010	3-323	Collected from the southern section of the white cylinder tanks located to the west of Building 3-323; appear to have fewer layers of paint than the northern section (white and beige only, possibly green).
NLS-ROOF01	Roof Runoff			To be collected from downspout near overhang of door N1 of Building 3-354. (Corrugated metal roof.)
NLS-ROOF02	Roof Runoff			Composite to be collected from downspouts at Building 3-355. (Corrugated metal roof.)
NLS-ROOF03	Roof Runoff			To be collected from downspout from overhang of door W1 (metal roof) at SW corner of Building 3-335.
NLS-ROOF04	Roof Runoff			To be collected from downspout next to door S2 of Building 3-353. (Corrugated metal overhang roof.)
NLS-ROOF05-072110	Roof Material	7/21/2010	3-315	Collected from black, crumbling, tar-like roofing material near fans on the roof of Building 3-315.
NLS-ROOF06	Roof Runoff			Composite to be collected from downspouts on west side of Building 3-315. Two of them.
NLS-ROOF08-072810	Roof Material	7/28/2010	3-368	Collected from degrading black roofing material on the lower roof of Building 3-368.
NLS-ROOF09	Roof Runoff			To be collected from downspout in corridor between tunnel and Building 3-368, drains south side of lower roof.
NLS-ROOF10	Roof Runoff			To be collected from downspout near corner of Building 3-310, just west of door S1 (metal roof).
NLS-ROOF12	Roof Runoff			To be collected from downspout on east side of Building 3-323; drains eastern portion of upper roof, plus lower roof on SE side.
NLS-ROOF13	Roof Runoff			To be collected from downspout from Building 3-365, SE corner.
NLS-ROOF15	Roof Runoff			To be collected from downspout from Building 3-350 left of door N2, north side.
NLS-ROOF16	Roof Runoff			To be collected from downspout of Building 3-331, east side.
NLS-ROOF17	Roof Runoff			To be collected from downspout of Building 3-332, NE corner.
NLS-ROOF18-072910	Roof Material	7/29/2010	3-322	Collected from the asphalt shingle roofing material on the roof of Building 3-322.
NLS-ROOF19	Roof Runoff			To be collected from downspout near SE corner of open-air structure between Buildings 3-322 and 3-332.
NLS-ROOF20-072910	Roof Material	7/29/2010	3-326	Collected from the black tar-like material with silver tinsel-like material laid on the roof of Building 3-326 at the north edge of the Building.
NLS-SURFACE01-072010	Surface Solids	7/20/2010	3-333	Collected from surface solids on the north side of Building 3-333 between door N-3 and the concrete retaining wall, including silver-colored metal shavings.
NLS-SURFACE02-072010	Surface Solids	7/20/2010	3-380	Collected from surface solids found in area around satellite dangerous waste cart, behind stall A-2, toward blast wall from 3-380, no visible leaking or spills from cart.
NLS-SURFACE03-072010	Surface Solids	7/20/2010	3-380	Collected from surface solids behind stall A-3, almost all the way to blast wall, some small paint flecks visible.
NLS-SURFACE04-072010	Surface Solids	7/20/2010	3-353	Collected from surface solids near the northeast corner of Building 3-353, just east of CB145A, some orange paint flecks visible.
NLS-SURFACE06-072910	Surface Solids	7/29/2010	3-350	Collected from surface solids west of Building 3-350 adjacent to cement curbing; white paint flecks visible.
NLS-SURFACE07-072910	Surface Solids	7/29/2010	3-365/3-365A	Collected from surface solids west of Building 3-365 and 3-365A, white granules are present on pavement.
NLS-SURFACE08-072910	Surface Solids	7/29/2010	3-326	Collected from surface solids located to left of door W2 of Building 3-326, visible metal, rust, and paint particulates.
NLS-SURFACE09-080210	Surface Solids	8/2/2010	3-626	Collected from surface solids along the south wall of Building 3-626, between doors S4 and S5, near location where 2 venting pipes discharge to surface.
NLS-SURFACE10-080210	Surface Solids	8/2/2010	3-353	Collected from surface solids near door W2 of Building 3-353, approximately 4 feet west of the Building wall and 4 feet north of the stairs.

TABLE 1
SAMPLE LOCATION NOTES
NORTH LATERAL SOURCE EVALUATION
NORTH BOEING FIELD

Sample Name	Sample Type	Date Sampled	Associated/Nearest Building Number	Sample Location Notes
NLS-SURFACE11-080210	Surface Solids	8/2/2010	3-368	Collected from surface solids between doors W1 and W2 of Building 3-368 along the north facing wall, solids were found in a trough below the red bell on the side of the Building.
NLS-SURFACE12-080210	Surface Solids	8/2/2010	3-368	Collected from surface solids found in fenced area located to the north of the northeast corner of building 3-368.
NLS-SURFACE13-080210	Surface Solids	8/2/2010	3-326	Collected from surface solids on the east side of Building 3-326, approximately 2 feet to the left of door E4.
NLS-SURFACE14-080210	Surface Solids	8/2/2010	3-315/3-354	Collected from surface solids found near the yellow bollards between the southeast corner of Building 3-315 and the northwest corner of 3-354.
NLS-SURFACE15-080210	Surface Solids	8/2/2010	3-315	Collected from surface solids beneath the silver pipes located on the north side of Building 3-315 to the right of door N5.
NLS-SURFACE16-080210	Surface Solids	8/2/2010	Substation 87	Collected from surface solids along the perimeter of Substation 87, at the corner with exposed piping on the southwest side.
NLS-SURFACE17-080210	Surface Solids	8/2/2010	Substation 87	Collected from surface solids in unpaved area along the perimeter of Substation 87, along the north side where the fenceline is divided.
NLS-SURFACE18-080210	Surface Solids	8/2/2010	Substation 87	Collected from surface solids along the perimeter of Substation 87, along the west side at the northernmost gate, to the right of the concrete ramp.
NLS-SURFACE19-080210	Surface Solids	8/2/2010	Substation 87	Collected from surface solids in the unpaved area near the exposed piping along perimeter of Substation 87, along the west side beyond the end of the asphalt.
NLS-SURFACE20-080210	Surface Solids	8/2/2010	3-350	Collected from surface solids on the north side of Building 3-350 to the right of door NE by the northeast corner of the building.
NLS-SURFACE21-080210	Surface Solids	8/2/2010	3-335	Collected from surface solids located approximately 12 feet east of Building 3-335, approximately 9 feet north of CB203.
NLS-SURFACE22-080210	Surface Solids	8/2/2010	3-333	Collected from surface solids located approximately 12 feet east from the northeast corner of Building 3-333.
NLS-SURFACE23-080410	Surface Solids	8/4/2010	3-626	Collected from surface solids located along the base of the east side of Building 3-626 from near sample PAINT18 to CB162.
NLS-WIPE01-072110	Wipe	7/21/2010	3-333	Collected from storage area for various metal equipment, from a rectangular silver structure located north of Building 3-333, along the property fence line.
NLS-WIPE02-072110	Wipe	7/21/2010	3-333	Collected from storage area for various metal equipment, from a cylindrical silver structure banded to a pallet located north of Building 3-333 along the property fence line.
NLS-WIPE03-072110	Wipe	7/21/2010	3-333	Collected from storage area for various metal equipment, from a green pressure cylinder located north of Building 3-333 along the property fence line.
NLS-WIPE04-072110	Wipe	7/21/2010	3-335	Collected from east wall of Building 3-335 between doors E1 and E2, where there is visible black staining from vent pipe.
NLS-WIPE05-072110	Wipe	7/21/2010	3-333/3-317	Collected from blue colored pipe (disconnected and not in use) at southern corner of Building 3-317, north of the northeast corner of Building 3-333.
NLS-WIPE07-072110	Wipe	7/21/2010	3-626	Collected from siding of building 3-626 east of door N4.
NLS-WIPE08-072110	Wipe	7/21/2010	3-626	Collected from orange stained area located near the northwest corner of Building 3-626.
NLS-WIPE09-072110	Wipe	7/21/2010	3-368	Collected from siding of Building 3-368 on the north facing wall near CB147.
NLS-WIPE10-072110	Wipe	7/21/2010	3-368	Collected from the bottom of the orange-stained metal door on the north wall of Building 3-368 near air intake unit.
NLS-WIPE11-072110	Wipe	7/21/2010	3-368	Collected from black soot on the metal blast wall located behind the wind tunnel, near Building 3-368.
NLS-WIPE12-072110	Wipe	7/21/2010	3-368	Collected from an older (not in use) metal blast wall located at the southeast corner of the wind tunnel near Building 3-368.
NLS-WIPE13-072110	Wipe	7/21/2010	3-368	Collected from the corrugated metal roof on Building 3-368, wiped the area from the upper roof where runoff from the west falls on the lower roof.
NLS-WIPE14-072110	Wipe	7/21/2010	3-323	Collected from the metal siding on the north facing wall on the east side of Building 3-323.
NLS-WIPE15-072110	Wipe	7/21/2010	3-323	Collected from the vent on the north facing wall on the east side of Building 3-323.
NLS-WIPE16-072110	Wipe	7/21/2010	3-332	Collected from the vent on the southwest corner of Building 3-332.
NLS-WIPE17-072110	Wipe	7/21/2010	3-626	Collected from inside of the yellow battery storage cart located inside the wet cell batter storage structure to the east of Building 3-626.
NLS-WIPE18-072110	Wipe	7/21/2010	3-626	Collected from the bottom overhang of the wet cell battery storage structure to the east of Building 3-626.

TABLE 2
WIPE ANALYTICAL DATA
NORTH LATERAL SOURCE EVALUATION
NORTH BOEING FIELD

	NLS-WIPE01 RF31A 7/21/2010	NLS-WIPE02 RF31B 7/21/2010	NLS-WIPE03 RF31C 7/21/2010	NLS-WIPE04 RF31D 7/21/2010	NLS-WIPE05 RF31E 7/21/2010	NLS-WIPE07 RF31F 7/21/2010	NLS-WIPE08 RF31G 7/21/2010	NLS-WIPE09 RF31H 7/21/2010	NLS-WIPE10 RF31I 7/21/2010
PCBs (ug)									
Method SW8082									
Aroclor 1016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1242	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1248	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1254	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1260	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1221	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1232	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total PCBs	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TOTAL METALS (ug)									
Methods SW6010B/SW7471A									
Arsenic	5 U	5 U	5 U	**6**	5 U	5 U	5 U	5 U	5 U
Cadmium	0.2 U	0.2 U	0.2 U	**44.0**	0.2 U	0.2 U	**0.3**	0.2 U	0.2 U
Chromium	**0.5**	**0.9**	0.5 U	**33.1**	**0.9**	0.5 U	**0.7**	0.5 U	**0.5**
Copper	1.2 U	1.8 U	1.2 U	**872**	3.1 U	1.3 U	3.2 U	1.1 U	1.6 U
Lead	2 U	2 U	2 U	**266**	2 U	**3**	**15**	2 U	2 U
Mercury	0.005 U	0.1 U	0.005 U	**0.062**	0.005 U	0.005 U	0.1 U	0.005 U	0.1 U
Silver	0.3 U	0.3 U	0.3 U	**46.9**	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Zinc	6 U	10 U	5 U	**1,120**	7 U	6 U	**349**	6 U	**28**

TABLE 2
WIPE ANALYTICAL DATA
NORTH LATERAL SOURCE EVALUATION
NORTH BOEING FIELD

	NLS-WIPE11 RF31J 7/21/2010	NLS-WIPE12 RF31K 7/21/2010	NLS-WIPE13 RF31L 7/21/2010	NLS-WIPE14 RF31M 7/21/2010	NLS-WIPE15 RF31N 7/21/2010	NLS-WIPE16 RF31O 7/21/2010	NLS-WIPE17 RF31P 7/21/2010	NLS-WIPE18 RF31Q 7/21/2010
PCBs (ug)								
Method SW8082								
Aroclor 1016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1242	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1248	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1254	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1260	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1221	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1232	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total PCBs	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TOTAL METALS (ug)								
Methods SW6010B/SW7471A								
Arsenic	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Cadmium	**1.4**	0.2 U	0.2 U	0.2 U	**0.9**	**0.5**	**0.4**	**0.3**
Chromium	**5.3**	**1.4**	**8.1**	**1.5**	**10.2**	**7.6**	**18.4**	**4.1**
Copper	**20.8**	3.0 U	**17.4**	1.1 U	**52.5**	**34.6**	1.7 U	**8.7**
Lead	**73**	**10**	**28**	**5**	**43**	**29**	**120**	**11**
Mercury	**0.132**	**0.008**	**0.010**	0.005 U	**0.090**	**0.011**	0.005 U	0.005 U
Silver	**0.3**	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Zinc	**90**	9 U	**108**	6 U	**2,160**	**1,730**	**73**	18 U

U = Indicates the compound was undetected at the reported concentration.
Bold = Detected compound.

TABLE 3
SOLID ANALYTICAL DATA
NORTH LATERAL SOURCE EVALUATION
NORTH BOEING FIELD

	NLS-ASP01 RF49M 7/22/2010	NLS-ASP02 RF81Q 7/26/2010	NLS-ASP03 RF08P 7/20/2010	NLS-ASP04 RG69O 7/30/2010	NLS-ASP05 RG69P 7/30/2010	NLS-ASP06 RG17B 7/28/2010	NLS-ASP07 RG33L 7/29/2010	NLS-ASP08 RG84P 8/2/2010	NLS-CAULK01 RF33A 7/21/2010	NLS-CAULK02 RF33B 7/21/2010	NLS-CAULK03 RF33I 7/21/2010	NLS-CAULK04 RF49D 7/22/2010	NLS-CAULK10 RG16P 7/28/2010	NLS-CAULK11 RG16N 7/28/2010	NLS-CAULK12 RG16Q 7/28/2010	NLS-CAULK14 RG33F 7/29/2010
PCBs (mg/kg)																
Method SW8082																
Aroclor 1016	0.031 U	0.031 U	0.031 U	0.062 U	0.061 U	0.031 U	0.05 U	0.03 U	0.79 U	0.79 U	0.80 U	0.77 U	0.80 U	0.80 U	0.79 U	0.79 U
Aroclor 1242	0.031 U	0.031 U	0.031 U	0.062 U	0.061 U	0.031 U	0.05 U	0.03 U	0.79 U	0.79 U	0.80 U	0.77 U	0.80 U	0.80 U	0.79 U	0.79 U
Aroclor 1248	**0.3**	0.031 U	0.031 U	0.062 U	0.076 U	0.031 U	0.12 U	0.03 U	0.79 U	0.79 U	0.80 U	0.77 U	0.80 U	0.80 U	0.79 U	0.79 U
Aroclor 1254	**0.57**	0.031 U	**0.045**	**0.16**	**0.25**	**0.051**	**0.64**	**0.039**	0.79 U	0.79 U	0.80 U	0.77 U	0.80 U	0.80 U	0.79 U	0.79 U
Aroclor 1260	**0.17**	0.031 U	0.031 U	0.062 U	**0.35**	0.031 U	**0.45**	**0.035**	0.79 U	0.79 U	0.80 U	0.77 U	0.80 U	0.80 U	0.79 U	0.79 U
Aroclor 1221	0.031 U	0.031 U	0.031 U	0.062 U	0.061 U	0.031 U	0.05 U	0.03 U	0.79 U	0.79 U	0.80 U	0.77 U	0.80 U	0.80 U	0.79 U	0.79 U
Aroclor 1232	0.031 U	0.046 U	0.031 U	0.062 U	0.061 U	0.031 U	0.05 U	0.03 U	0.79 U	0.79 U	0.80 U	0.77 U	0.80 U	0.80 U	0.79 U	0.79 U
Total PCBs	**1.04**	0.031 U	**0.045**	**0.16**	**0.60**	**0.051**	**1.09**	**0.074**	0.79 U	0.79 U	0.80 U	0.77 U	0.80 U	0.80 U	0.79 U	0.79 U
TOTAL METALS (mg/kg)																
Methods SW6010B/SW7471A																
Arsenic	5 U	10 U	5 U	5 U	5 U	5 U	**10**	5 U	10 U	20 U	20 U	50 U	10 U	10 U	50 U	50 U
Cadmium	**1.4**	**0.7**	**0.5**	**0.4**	**1.8**	**3.7**	**19.1**	**1.0**	0.5 U	0.9 U	**106**	2 U	0.5 U	**1.0**	2 U	2 U
Chromium	**24.8**	**28**	**25.6**	**24.4**	**32.9**	**27.7**	**43**	**32.2**	**7**	2 U	2 U	5 U	**92**	1 U	**21**	5 U
Copper	**23.7**	**34.7**	**27.0**	**27.1**	**28.6**	**42.6**	**74.8**	**41.7**	**6.1**	**1.7**	**5.6**	**6**	**3.0**	**3.1**	**4**	**11**
Lead	**42**	**9**	**11**	**13**	**1,900**	**17**	**139**	**37**	5 U	9 U	9 U	20 U	5 U	5 U	**40**	**160**
Mercury	**0.09**	**0.04**	**1.13**	0.02 U	**0.12**	0.02 U	**1.25**	**0.03**	0.02 U	0.02 U	0.02 U	0.02 U	**3.7**	0.02 U	**0.09**	**0.05**
Silver	0.3 U	0.7 U	0.3 U	0.3 U	0.3 U	0.3 U	0.7 U	0.3 U	0.7 U	1 U	1 U	3 U	0.7 U	0.7 U	3 U	3 U
Zinc	**82**	**94**	**78.1**	**54**	**148**	**154**	**147**	**330**	**11**	**8**	**28**	**208**	**13**	**12,800**	**235**	**260**

TABLE 3
SOLID ANALYTICAL DATA
NORTH LATERAL SOURCE EVALUATION
NORTH BOEING FIELD

	NLS-CAULK16 RG69M 7/30/2010	NLS-CAULK17 RG16O 7/28/2010	NLS-CAULK19 RG33D 7/29/2010	NLS-CAULK20 RG33E 7/29/2010	NLS-CAULK22 RG33G 7/29/2010	NLS-CONC01 RF08H 7/20/2010	NLS-CONC02 RG16R 7/28/2010	NLS-CONC03 RG17A 7/28/2010	NLS-CONC04 RF81O 7/26/2010	NLS-CONC06 RF08O 7/20/2010	NLS-CONC07 RG33J 7/29/2010	NLS-CONC08 RF08M 7/20/2010	NLS-CONC09 RF81P 7/26/2010	NLS-CONC10 RG84O 8/2/2010	NLS-MAT01 RF33D 7/21/2010
PCBs (mg/kg)															
Method SW8082															
Aroclor 1016	2.7 U	0.79 U	0.79 U	1600 U	0.79 U	0.032 U	0.031 U	0.031 U	0.032 U	0.032 U	0.031 U	0.03 U	0.032 U	0.032 U	0.79 U
Aroclor 1242	2.7 U	0.79 U	0.79 U	1600 U	0.79 U	0.032 U	0.031 U	0.031 U	0.032 U	0.032 U	0.031 U	0.03 U	0.032 U	0.032 U	0.79 U
Aroclor 1248	**2.9**	1.5 U	0.79 U	**14,000**	0.79 U	0.032 U	0.031 U	0.031 U	**0.091**	0.032 U	0.031 U	0.03 U	0.032 U	0.032 U	0.79 U
Aroclor 1254	**4**	0.79 U	0.79 U	2400 U	0.79 U	0.032 U	0.031 U	**0.066**	**0.2**	0.032 U	0.031 U	0.03 U	0.032 U	0.032 U	0.79 U
Aroclor 1260	**4.7**	0.79 U	0.79 U	1600 U	0.79 U	0.032 U	0.031 U	0.031 U	**0.26**	**0.38**	0.031 U	0.03 U	0.032 U	0.032 U	0.79 U
Aroclor 1221	2.7 U	0.79 U	0.79 U	1600 U	0.79 U	0.032 U	0.031 U	0.031 U	0.032 U	0.032 U	0.031 U	0.03 U	0.032 U	0.032 U	0.79 U
Aroclor 1232	2.7 U	0.79 U	0.79 U	1600 U	0.79 U	0.032 U	0.031 U	0.031 U	0.032 U	0.032 U	0.031 U	0.03 U	0.032 U	0.032 U	0.79 U
Total PCBs	**11.6**	0.79 U	0.79 U	**14,000**	0.79 U	0.032 U	0.031 U	**0.066**	**0.551**	**0.38**	0.031 U	0.03 U	0.032 U	0.032 U	0.79 U
TOTAL METALS (mg/kg)															
Methods SW6010B/SW7471A															
Arsenic	10 U	5 U	20 U	**53**	50 U	10 U	**20**	**20**	30 U	**50**	**30**	20 U	10 U	10 U	20 U
Cadmium	0.5 U	0.2 U	1 U	**10.7**	2 U	**7.8**	**31.9**	**3.4**	**5**	**1.3**	**1.2**	1 U	**1.1**	**2.5**	**6**
Chromium	**29**	**1.0**	2 U	**155**	5 U	**38**	**32**	**41**	**43**	**41**	**38**	**46**	**32**	**34**	**103**
Copper	**3.3**	**1.9**	**2**	**20.0**	**2**	**32.0**	**50.4**	**181**	**16**	**406**	**73.3**	**74**	**199**	**263**	**50**
Lead	**308**	2 U	10 U	**30**	20 U	**8**	**22**	**46**	**30**	**41**	**13**	**50**	**13**	**18**	**160**
Mercury	**14**	0.02 U	**0.12**	**40.8**	**0.36**	**0.13**	0.02 U	**0.03**	**0.04**	**0.04**	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Silver	0.7 U	0.3 U	1 U	0.3 U	3 U	0.8 U	0.80 U	0.7 U	2 U	0.8 U	0.8 U	1 U	0.8 U	**1.8**	1 U
Zinc	**213**	**24.5**	**7**	**485**	**490**	**131**	**2,140**	**155**	**467**	**478**	**1,050**	**155**	**226**	**2,130**	**1,050**

TABLE 3
SOLID ANALYTICAL DATA
NORTH LATERAL SOURCE EVALUATION
NORTH BOEING FIELD

	NLS-MAT02 RF33E 7/21/2010	NLS-MAT03 RF33G 7/21/2010	NLS-MAT04 RF33J 7/21/2010	NLS-MAT05 RF49F 7/22/2010	NLS-MAT06 RF49L 7/22/2010	NLS-MAT08 RF81R 7/26/2010	NLS-MAT09 RG17E 7/28/2010	NLS-MAT10 RG69Q 7/30/2010	NLS-MAT12 RG69K 7/30/2010	NLS-MAT13 RG69L 7/30/2010	NLS-MAT14 RG69R 7/30/2010	NLS-MAT15 RG70A 7/30/2010	NLS-MAT16 RG33H 7/29/2010	NLS-MAT17 RG33I 7/29/2010	NLS-MAT19 7/20/2010 RF08N	NLS-MAT20 RF31S 7/21/2010
PCBs (mg/kg)																
Method SW8082																
Aroclor 1016	0.79 U	0.80 U	0.79 U	0.75 U	750 U	0.03 U	0.79 U	2.5 U	0.68 U	0.62 U	2.8 U	16 U	0.79 U	1.6 U	1.2 U	0.04 U
Aroclor 1242	0.79 U	0.80 U	0.79 U	0.75 U	750 U	0.03 U	0.79 U	2.5 U	0.68 U	0.62 U	2.8 U	16 U	0.79 U	1.6 U	1.2 U	0.04 U
Aroclor 1248	0.79 U	1.0 U	0.79 U	0.75 U	750 U	**0.054**	0.79 U	2.5 U	0.68 U	0.62 U	**5.5**	16 U	0.79 U	1.6 U	1.2 U	0.12 U
Aroclor 1254	0.79 U	**1.1**	0.79 U	0.75 U	**4,800**	**0.082**	0.79 U	2.5 U	0.68 U	0.62 U	**4.3**	48 U	0.79 U	1.6 U	**15**	**0.45**
Aroclor 1260	0.79 U	0.80 U	0.79 U	0.75 U	**11,000**	**0.036**	0.79 U	2.5 U	0.68 U	0.62 U	2.8 U	40 U	0.79 U	1.6 U	2.9 U	**0.99**
Aroclor 1221	0.79 U	0.80 U	0.79 U	0.75 U	750 U	0.03 U	0.79 U	2.5 U	0.68 U	0.62 U	2.8 U	16 U	0.79 U	1.6 U	1.2 U	0.04 U
Aroclor 1232	0.79 U	0.80 U	0.79 U	0.75 U	750 U	0.03 U	0.79 U	2.5 U	0.68 U	0.62 U	2.8 U	16 U	0.79 U	1.6 U	1.2 U	0.04 U
Total PCBs	0.79 U	**1.1**	0.79 U	0.75 U	**15,800**	**0.172**	0.79 U	2.5 U	0.68 U	0.62 U	**9.8**	16 U	0.79 U	1.6 U	**15**	**1.44**
TOTAL METALS (mg/kg)																
Methods SW6010B/SW7471A																
Arsenic	20 U	10 U	**79**	5 U	10 U	240 U	**63**	10 U	**7**	5 U	5 U	9 U	250 U	**295**	180 U	50 U
Cadmium	**1**	**12.1**	0.2 U	**1.1**	**1.5**	9 U	**0.2**	**0.6**	**1.9**	**2.0**	**2.7**	0.4 U	10 U	**0.5**	**30**	**7**
Chromium	**12**	**3**	**107**	**10.6**	**7**	**130**	**117**	**7**	**121**	**10.0**	**19.1**	**4.8**	**180**	**280**	**190**	**212**
Copper	**8**	**6.3**	**7.2**	**5.5**	**7.6**	**456**	**11.5**	**18.9**	**13.3**	**28.8**	**13.9**	**13.6**	**180**	**5.7**	**618**	**398**
Lead	10 U	**11**	**13**	**5**	**18**	90 U	**11**	**18**	**844**	**39**	**57**	**9**	100 U	**29**	**1,350**	**2,700**
Mercury	0.02 U	**0.08**	0.02 U	0.02 U	**0.27**	0.02 U	0.02 U	0.02 U	**0.20**	**0.04**	**17**	0.02 U	0.02 U	0.02 U	**9.8**	**0.67**
Silver	1 U	0.7 U	0.3 U	0.3 U	0.7 U	10 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.6 U	10 U	0.3 U	10 U	3 U
Zinc	**23**	**13,900**	**93**	**116**	**21,100**	**2,180**	**213**	**200**	**503**	**9,070**	**8,600**	**27**	**850**	**1,150**	**9,190**	**5,150**

TABLE 3
SOLID ANALYTICAL DATA
NORTH LATERAL SOURCE EVALUATION
NORTH BOEING FIELD

	NLS-MAT21 RF49A 7/22/2010	NLS-MAT22 RG17D 7/28/2010	NLS-MAT23 RH18B 8/4/2010	NLS-PAINT01 RF08A 7/20/2010	NLS-PAINT03 RF08D 7/20/2010	NLS-PAINT04 RF08C 7/20/2010	NLS-PAINT05 RF08E 7/20/2010	NLS-PAINT06 RF08J 7/20/2010	NLS-PAINT07 RF08L 7/20/2010	NLS-PAINT08 RF08I 7/20/2010	NLS-PAINT09 RF33C 7/21/2010	NLS-PAINT10 RF33F 7/21/2010	NLS-PAINT11 RF33H 7/21/2010	NLS-PAINT12 RF49B 7/22/2010	NLS-PAINT13 RF49C 7/22/2010
PCBs (mg/kg)															
Method SW8082															
Aroclor 1016	0.031 U	3.6 U	0.80 U	0.80 U	0.80 U	0.79 U	0.79 U	0.80 U	0.79 U	80 U	0.80 U	0.80 U	0.80 U	0.78 U	0.80 U
Aroclor 1242	0.031 U	3.6 U	0.80 U	0.80 U	0.80 U	0.79 U	0.79 U	0.80 U	0.79 U	80 U	0.80 U	0.80 U	0.80 U	0.78 U	0.80 U
Aroclor 1248	0.031 U	3.6 U	16 U	0.80 U	0.80 U	0.79 U	**2.4**	0.80 U	0.79 U	560 U	0.80 U	0.80 U	0.80 U	0.78 U	0.80 U
Aroclor 1254	0.031 U	3.6 U	0.80 U	0.80 U	0.80 U	0.79 U	2.4 U	0.80 U	0.79 U	**1,700**	0.80 U	0.80 U	0.80 U	0.78 U	0.80 U
Aroclor 1260	0.031 U	3.6 U	20 U	0.80 U	0.80 U	0.79 U	3.9 U	0.80 U	0.79 U	160 U	0.80 U	0.80 U	0.80 U	0.78 U	0.80 U
Aroclor 1221	0.031 U	3.6 U	0.80 U	0.80 U	0.80 U	0.79 U	0.79 U	0.80 U	0.79 U	80 U	0.80 U	0.80 U	0.80 U	0.78 U	0.80 U
Aroclor 1232	0.031 U	5.4 U	0.80 U	0.80 U	0.80 U	0.79 U	0.79 U	0.80 U	0.79 U	80 U	0.80 U	0.80 U	0.80 U	0.78 U	0.80 U
Total PCBs	0.031 U	3.6 U	0.80 U	0.80 U	0.80 U	0.79 U	**2.4**	0.80 U	0.79 U	**1,700**	0.80 U	0.80 U	0.80 U	0.78 U	0.80 U
TOTAL METALS (mg/kg)															
Methods SW6010B/SW7471A															
Arsenic	5 U	**22**	NA	10 UJ	5 U	120 U	5 U	20 U	120 U	**30**	120 U	110 U	120 U	5 U	10 U
Cadmium	0.2 U	**0.4**	NA	**4.6** J	**0.5**	**15**	**17.4**	**2**	**25**	**2**	**7**	**35**	5 U	**0.6**	**10.6**
Chromium	**0.6**	**16.0**	NA	**16**	**6.5**	**70**	**29.4**	**2,850**	**60**	**35,600**	**1,080**	**610**	**100**	**24.7**	**10,700**
Copper	**0.4**	**15.5**	NA	**35.6**	**19.9**	**21**	**5.2**	**17**	**65**	**74**	**84**	**237**	**51**	**32.1**	**14.4**
Lead	2 U	**171**	NA	**271** J	**9**	50 U	**13,600**	**11,400**	**110**	**58,600**	**13,400**	**1,400**	**170**	**30**	**31,000**
Mercury	0.03 U	**0.67**	NA	**0.03**	**0.02**	0.02 U	**0.11**	0.02 U	**0.03**	**0.14**	**0.04**	**0.07**	**0.05**	**0.12**	**0.74**
Silver	0.3 U	0.3 U	NA	**6.8** J	0.3 U	7 U	**1.5**	1 U	7 U	**2**	7 U	7 U	7 U	0.3 U	0.7 U
Zinc	**8**	**255**	NA	**15,500**	**147**	**5,950**	**2,440**	**1,670**	**123,000**	**943**	**240**	**1,730**	**410**	**222**	**288**

TABLE 3
SOLID ANALYTICAL DATA
NORTH LATERAL SOURCE EVALUATION
NORTH BOEING FIELD

	NLS-PAINT14 RF49E 7/22/2010	NLS-PAINT15 RF49G 7/22/2010	NLS-PAINT16 RF49H 7/22/2010	NLS-PAINT17 RF49I 7/22/2010	NLS-PAINT18 RF49J 7/22/2010	NLS-PAINT19 RF81N 7/26/2010	NLS-PAINT20 RF81K 7/26/2010	NLS-PAINT21 RF81L 7/26/2010	NLS-PAINT22 RF81M 7/26/2010	NLS-PAINT23 RF81J 7/26/2010	NLS-PAINT24 RF81A 7/26/2010	NLS-PAINT25 RF81H 7/26/2010	NLS-PAINT27 RG16H 7/28/2010	NLS-PAINT28 RG16J 7/28/2010	NLS-PAINT29 RG16G 7/28/2010
PCBs (mg/kg)															
Method SW8082															
Aroclor 1016	0.79 U	0.80 U	0.79 U	0.80 U	0.79 U	0.80 U	0.79 U	0.79 U	0.80 U	0.80 U	0.80 U	0.79 U	3.9 U	0.79 U	4 U
Aroclor 1242	0.79 U	0.80 U	0.79 U	0.80 U	0.79 U	0.80 U	0.79 U	0.79 U	0.80 U	0.80 U	0.80 U	0.79 U	3.9 U	0.79 U	4 U
Aroclor 1248	0.79 U	**2.6**	0.79 U	0.80 U	0.79 U	**2.8**	0.79 U	0.79 U	2.4 U	0.80 U	2 U	1.6 U	4.6 U	1.5 U	4 U
Aroclor 1254	0.79 U	1.0 U	0.79 U	**4.4**	**8.7**	**2.6**	**1.4**	0.79 U	**4.8**	0.80 U	**2.4**	0.79 U	**16**	**2.7**	8.2 U
Aroclor 1260	0.79 U	0.80 U	0.79 U	**5**	**8.2**	0.80 U	0.79 U	0.79 U	**0.97**	0.80 U	0.80 U	0.79 U	**14**	**1.7**	**27**
Aroclor 1221	0.79 U	0.80 U	0.79 U	0.80 U	0.79 U	0.80 U	0.79 U	0.79 U	0.80 U	0.80 U	0.80 U	0.79 U	3.9 U	0.79 U	4 U
Aroclor 1232	0.79 U	0.80 U	0.79 U	0.80 U	0.79 U	0.80 U	0.79 U	0.79 U	0.80 U	0.80 U	0.80 U	0.79 U	3.9 U	0.79 U	4 U
Total PCBs	0.79 U	**2.6**	0.79 U	**9.4**	**16.9**	**5.4**	**1.4**	0.79 U	**5.77**	0.80 U	**2.4**	0.79 U	**30**	**4.4**	**27**
TOTAL METALS (mg/kg)															
Methods SW6010B/SW7471A															
Arsenic	20 U	50 U	120 U	5 U	10 U	10 U	50 U	110 U	10 U	20 U	50 U	5 U	**140**	120 U	**20**
Cadmium	1 U	**59**	**219**	**22.6**	**7.3**	**1.9**	**7**	**5**	**4.5**	**439**	**8**	**0.8**	**68**	**17**	**28.2**
Chromium	**4,120**	**1,300**	**2,150**	**49.8**	**84**	**9**	**442**	**460**	**133**	**289**	**20,400**	**21.9**	**6,920**	**8,890**	**4,490**
Copper	**22**	**542**	**717**	**301**	**15.0**	**20.2**	**136**	**310**	**28.7**	**295**	**64**	**36.1**	**246**	**204**	**369**
Lead	**16,600**	**1,150**	50 U	**338**	**444**	**34**	**1,520**	**350**	**1,770**	**970**	**43,400**	**54**	**16,600**	**18,200**	**27,000**
Mercury	**0.12**	**0.11**	**0.06**	**2.30**	**4**	**50**	**2.11**	**0.08**	**6**	**1.5**	**0.46**	**0.03**	**0.20**	**2.21**	**0.85**
Silver	1 U	3 U	7 U	0.3 U	0.7 U	0.7 U	**6**	7 U	**3.2**	1 U	3 U	0.3 U	3 U	7 U	0.7 U
Zinc	**264**	**3,400**	**6,990**	**3,030**	**1,870**	**124**	**1,880**	**530**	**5,580**	**458**	**12,100**	**7,300**	**5,760**	**6,760**	**3,520**

TABLE 3
SOLID ANALYTICAL DATA
NORTH LATERAL SOURCE EVALUATION
NORTH BOEING FIELD

	NLS-PAINT31 RG16F 7/28/2010	NLS-PAINT32 RG16I 7/28/2010	NLS-PAINT33 RF81B 7/26/2010	NLS-PAINT34 RF81C 7/26/2010	NLS-PAINT35 RF81I 7/26/2010	NLS-PAINT36 RF81E 7/26/2010	NLS-PAINT37 RF81G 7/26/2010	NLS-PAINT38 RF81D 7/26/2010	NLS-PAINT39 RF81F 7/26/2010	NLS-PAINT41 RG16M 7/28/2010	NLS-PAINT42 RG16L 7/28/2010	NLS-PAINT43 RG16C 7/28/2010	NLS-PAINT44 RG33N 7/29/2010	NLS-PAINT45 RG33O 7/29/2010	NLS-PAINT47 RG33P 7/29/2010
PCBs (mg/kg)															
Method SW8082															
Aroclor 1016	0.79 U	0.80 U	0.80 U	0.79 U	0.80 U	0.80 U	0.79 U	16 U	0.79 U	0.79 U	0.80 U	0.79 U	0.80 U	0.79 U	0.80 U
Aroclor 1242	0.79 U	0.80 U	0.80 U	0.79 U	0.80 U	0.80 U	0.79 U	16 U	0.79 U	0.79 U	0.80 U	0.79 U	0.80 U	0.79 U	0.80 U
Aroclor 1248	2.6 U	1.6 U	0.80 U	0.79 U	0.80 U	0.80 U	**2.1**	120 U	3.5 U	2.9 U	**11**	0.79 U	0.80 U	0.79 U	0.80 U
Aroclor 1254	**6.6**	**3**	0.80 U	0.79 U	0.80 U	0.80 U	**2.8**	**580**	**3.3**	**6.4**	**11**	0.79 U	0.80 U	0.79 U	0.80 U
Aroclor 1260	2 U	**1.5**	0.80 U	0.79 U	0.80 U	0.80 U	1.2 U	**170**	1.2 U	1.8 U	**3.5**	0.79 U	0.80 U	0.79 U	0.80 U
Aroclor 1221	0.79 U	0.80 U	0.80 U	0.79 U	0.80 U	0.80 U	0.79 U	16 U	0.79 U	0.79 U	0.80 U	0.79 U	0.80 U	0.79 U	0.80 U
Aroclor 1232	0.79 U	0.80 U	0.80 U	0.79 U	0.80 U	0.80 U	0.79 U	16 U	0.79 U	0.79 U	0.80 U	0.79 U	0.80 U	0.79 U	0.80 U
Total PCBs	**6.6**	**4.5**	0.80 U	0.79 U	0.80 U	0.80 U	**4.9**	**750**	**3.3**	**6.4**	**25.5**	0.79 U	0.80 U	0.79 U	0.80 U
TOTAL METALS (mg/kg)															
Methods SW6010B/SW7471A															
Arsenic	20 U	10 U	**20**	10 U	10 U	120 U	5 U	**30**	120 U	5 U	120 U	120 U	120 U	20 U	5 U
Cadmium	**12**	**8.3**	**3.1**	**13.1**	**1.2**	**19**	**3.2**	**1.5**	**5**	**10.6**	**16**	**9**	**5**	**2**	**8.9**
Chromium	**647**	**8,940**	**17,600**	**11**	**2**	**2,130**	**14.5**	**27,500**	**2,440**	**45.8**	**830**	**7,540**	**40**	**617**	**598**
Copper	**11**	**2,950**	**9.5**	**18.4**	**3.7**	**178**	**5.0**	**74.8**	**97**	**68.5**	**872**	**757**	**129**	**12**	**284**
Lead	**230**	**139**	**35,900**	**21**	**601**	**500**	**83**	**54,700**	**32,700**	**201**	**1,520**	**830**	50 U	**2,640**	**1,920**
Mercury	**0.06**	**0.12**	**0.10**	0.02 U	0.02 U	**0.11**	**0.63**	**0.07**	**5.3**	**43**	**25**	**9**	**0.03**	0.02 U	**0.10**
Silver	**3**	0.7 U	**1.9**	**1.9**	**1.9**	7 U	**2.3**	1 U	7 U	0.3 U	**9**	7 U	7 U	1 U	**2.2**
Zinc	**28,600**	**11,100**	**13,900**	**1,400**	**12,700**	**9,500**	**2,090**	**885**	**4,440**	**1,120**	**2,840**	**17,800**	**270**	**5,540**	**4,770**

TABLE 3
SOLID ANALYTICAL DATA
NORTH LATERAL SOURCE EVALUATION
NORTH BOEING FIELD

	NLS-PAINT48 RG69B 7/30/2010	NLS-PAINT49 RG69C 7/30/2010	NLS-PAINT50 RG69D 7/30/2010	NLS-PAINT51 RG69E 7/30/2010	NLS-PAINT52 RG69F 7/30/2010	NLS-PAINT53 RG69G 7/30/2010	NLS-PAINT55 RG69H 7/30/2010	NLS-PAINT56 RG69I 7/30/2010	NLS-PAINT57 RG69J 7/30/2010	NLS-PAINT58 RG69N 7/30/2010	NLS-PAINT59 RG16A 7/28/2010	NLS-PAINT60 RG16B 7/28/2010	NLS-PAINT61 RG16D 7/28/2010	NLS-PAINT62 RG16K 7/28/2010	NLS-PAINT64 RG33Q 7/29/2010
PCBs (mg/kg)															
Method SW8082															
Aroclor 1016	0.52 U	0.65 U	0.77 U	0.53 U	0.69 U	0.60 U	0.39 U	0.48 U	0.54 U	1.1 U	0.79 U	3.9 U	3.9 U	0.80 U	1.6 U
Aroclor 1242	0.52 U	0.65 U	0.77 U	0.53 U	0.69 U	0.60 U	0.39 U	0.48 U	0.54 U	1.1 U	0.79 U	3.9 U	3.9 U	0.80 U	1.6 U
Aroclor 1248	0.52 U	0.65 U	0.77 U	0.53 U	0.69 U	0.60 U	0.39 U	0.48 U	0.54 U	**3.4**	0.79 U	**37**	**36**	0.80 U	**2.8**
Aroclor 1254	0.52 U	0.65 U	0.77 U	0.53 U	0.69 U	0.60 U	0.39 U	0.48 U	0.54 U	**6**	0.79 U	**61**	**100**	0.80 U	**5.8**
Aroclor 1260	0.52 U	0.65 U	0.77 U	0.53 U	0.69 U	0.60 U	0.39 U	0.48 U	0.54 U	**7.9**	0.79 U	6.7 U	18 U	0.80 U	1.6 U
Aroclor 1221	0.52 U	0.65 U	0.77 U	0.53 U	0.69 U	0.60 U	0.39 U	0.48 U	0.54 U	1.1 U	0.79 U	3.9 U	3.9 U	0.80 U	1.6 U
Aroclor 1232	0.52 U	0.65 U	0.77 U	0.53 U	0.69 U	0.60 U	0.39 U	0.48 U	0.54 U	1.1 U	0.79 U	3.9 U	3.9 U	0.80 U	1.6 U
Total PCBs	0.52 U	0.65 U	0.77 U	0.53 U	0.69 U	0.60 U	0.39 U	0.48 U	0.54 U	**17.3**	0.79 U	**98**	**136**	0.80 U	**8.6**
TOTAL METALS (mg/kg)															
Methods SW6010B/SW7471A															
Arsenic	120 U	10 U	10 U	50 U	**40**	120 U	5 U	10 U	20 U	**30**	120 U	50 U	120 U	**30**	**40**
Cadmium	5 U	**5.6**	**0.8**	**3**	**51**	**12**	0.2 U	**2.4**	**11**	**42.3**	5 U	**116**	**14**	**21**	**34.3**
Chromium	**50**	**116**	**8**	**39**	**148**	**3,280**	**98.6**	**9**	**1,110**	**225**	**160**	**259**	**1,130**	**50**	**126**
Copper	**97**	**5.3**	**15.4**	**73**	**186**	**94**	**1.4**	**7.6**	**98**	**16.8**	**68**	**143**	**512**	**151**	**253**
Lead	50 U	**12,400**	**26**	**20**	**5,330**	**11,100**	**1,570**	**21**	**10,600**	**21,800**	50 U	**11,500**	**3,210**	**140**	**1,710**
Mercury	0.02 U	**20**	**0.14**	**0.02**	**4.3**	**0.12**	**0.06**	**0.02**	**0.02**	**28**	**0.03**	**23**	**17**	**0.14**	**14**
Silver	7 U	0.7 U	0.7 U	3 U	1 U	7 U	0.3 U	**4.5**	1 U	**1.1**	7 U	3 U	7 U	**12**	1 U
Zinc	**620**	**17,500**	**363**	**2,760**	**4,340**	**3,620**	**11**	**275**	**30,100**	**18,600**	**750**	**19,500**	**5,460**	**34,200**	**8,510**

TABLE 3
SOLID ANALYTICAL DATA
NORTH LATERAL SOURCE EVALUATION
NORTH BOEING FIELD

	NLS-PAINT65 RG16E 7/28/2010	NLS-PAINT66 RG17F 7/28/2010	NLS-PAINT68 RG33R 7/29/2010	NLS-PAINT70 RG33S 7/29/2010	NLS-PAINT71 RG33T 7/29/2010	NLS-PAINT72 RG70C 7/30/2010	NLS-PAINT73 RG70B 7/30/2010	NLS-PAINT74 RH03A 8/3/2010	NLS-PAINT74 RK35C 08/25/2010	NLS-PAINT75 RH03B 8/3/2010	NLS-PAINT76 RH03C 8/3/2010	NLS-PAINT77 RH03D 8/3/2010	NLS-PAINT78 RH03E 8/3/2010	NLS-PAINT79 RH03F 8/3/2010	NLS-PAINT80 RH18A 8/4/2010
PCBs (mg/kg)															
Method SW8082															
Aroclor 1016	4 U	1.6 U	0.8 U	31 U	0.80 U	0.80 U	0.80 U	16 U	79 U	1.1 U	0.79 U	0.80 U	1.0 U	0.83 U	0.79 U
Aroclor 1242	4 U	1.6 U	0.8 U	31 U	0.80 U	0.80 U	0.80 U	16 U	79 U	1.1 U	0.79 U	0.80 U	1.0 U	0.83 U	0.79 U
Aroclor 1248	65 U	**4**	3 U	47 U	0.80 U	0.80 U	0.80 U	950 U	390 U	1.1 U	0.79 U	0.80 U	1.0 U	1.2 U	**2.5**
Aroclor 1254	**250**	**8.1**	**5.9**	**160**	0.80 U	0.80 U	0.80 U	**2,300**	**1,900**	1.1 U	0.79 U	0.80 U	1.0 U	**1.7**	**2.1**
Aroclor 1260	24 U	1.6 U	1.4 U	31 U	0.80 U	0.80 U	0.80 U	320 U	200 U	1.1 U	0.79 U	0.80 U	1.0 U	0.83 U	0.79 U
Aroclor 1221	4 U	1.6 U	0.8 U	31 U	0.80 U	0.80 U	0.80 U	16 U	79 U	1.1 U	0.79 U	0.80 U	1.0 U	0.83 U	0.79 U
Aroclor 1232	4 U	1.6 U	0.8 U	31 U	0.80 U	0.80 U	0.80 U	16 U	79 U	1.1 U	0.79 U	0.80 U	1.0 U	0.83 U	0.79 U
Total PCBs	**250**	**12.1**	**5.9**	**160**	0.80 U	0.80 U	0.80 U	**2,300**	**1,900**	1.1 U	0.79 U	0.80 U	1.0 U	**1.7**	**4.6**
TOTAL METALS (mg/kg)															
Methods SW6010B/SW7471A															
Arsenic	5 U	10 U	120 U	5 U	10 U	120 U	20 U	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	**8.4**	**154**	**15**	**9.0**	**1.6**	**6**	**3**	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	**8.2**	**170**	**1,630**	**16.5**	**66**	**360**	**7,280**	NA	NA	NA	NA	NA	NA	NA	NA
Copper	**53.0**	**88.9**	**462**	**110**	**28.3**	**69**	**145**	NA	NA	NA	NA	NA	NA	NA	NA
Lead	**70**	**519**	**5,070**	**109**	**16**	**370**	**9,580**	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	**130**	**1.61**	**10**	**37**	**3.1**	**0.24**	**0.04**	NA	NA	NA	NA	NA	NA	NA	NA
Silver	0.3 U	**2.0**	7 U	0.3 U	0.7 U	7 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	**195**	**2,780**	**6,600**	**3,610**	**2,890**	**1,040**	**539**	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 3
SOLID ANALYTICAL DATA
NORTH LATERAL SOURCE EVALUATION
NORTH BOEING FIELD

	NLS-PAINT81 RH18D 8/4/2010	NLS-PAINT82 RH18E 8/4/2010	NLS-PAINT83 RH18F 8/4/2010	NLS-PAINT84 RH18G 8/4/2010	NLS-PAINT85 RK35D 08/25/2010	NLS-PAINT86 RK35E 08/25/2010	NLS-ROOF05 RF33K 7/21/2010	NLS-ROOF08 RG17C 7/28/2010	NLS-ROOF18 RG33K 7/29/2010	NLS-ROOF20 RG33M 7/29/2010	NLS-SURFACE01 RF08B 7/20/2010	NLS-SURFACE02 RF08F 7/20/2010	NLS-SURFACE03 RF08G 7/20/2010	NLS-SURFACE04 RF080K 7/20/2010
PCBs (mg/kg)														
Method SW8082														
Aroclor 1016	0.79 U	0.80 U	4 U	0.79 U	0.8 U	3.2 U	0.80 U	0.80 U	3.7 U	0.80 U	0.03 U	0.031 U	0.031 U	0.03 U
Aroclor 1242	0.79 U	0.80 U	**6**	0.79 U	0.8 U	3.2 U	0.80 U	0.80 U	3.7 U	0.80 U	0.03 U	0.031 U	0.031 U	0.03 U
Aroclor 1248	1.2 U	**1.1**	4 U	0.79 U	**2.4**	**14**	0.80 U	0.80 U	3.7 U	0.80 U	0.03 U	0.031 U	0.031 U	0.03 U
Aroclor 1254	0.79 U	0.80 U	4 U	0.79 U	**2.9**	**8.6**	0.80 U	**0.92**	3.7 U	0.80 U	**0.2**	**0.4**	**0.2**	**0.29**
Aroclor 1260	0.79 U	0.80 U	**40**	0.79 U	1.2 U	3.2 U	0.80 U	0.80 U	3.7 U	0.80 U	**0.15**	**0.26**	**0.14**	**0.31**
Aroclor 1221	0.79 U	0.80 U	4 U	0.79 U	0.8 U	3.2 U	0.80 U	0.80 U	3.7 U	0.80 U	0.03 U	0.031 U	0.031 U	0.03 U
Aroclor 1232	0.79 U	0.80 U	4 U	0.79 U	0.8 U	3.2 U	0.80 U	0.80 U	3.7 U	0.80 U	0.03 U	0.031 U	0.031 U	0.03 U
Total PCBs	0.79 U	**1.1**	**46**	0.79 U	**5.3**	**22.6**	0.80 U	**0.92**	3.7 U	0.80 U	**0.35**	**0.66**	**0.34**	**0.6**
TOTAL METALS (mg/kg)														
Methods SW6010B/SW7471A														
Arsenic	NA	NA	NA	10 U	NA	NA	**23**	10 U	5 U	**40**	10 U	**6**	**16**	10 U
Cadmium	NA	NA	NA	0.5 U	NA	NA	**12.0**	0.5 U	0.2 U	0.5 U	**10.5**	**33.6**	**12.8**	**2.6**
Chromium	NA	NA	NA	**6**	NA	NA	**307**	**93**	**2.7**	**88**	**489**	**90.9**	**371**	**232**
Copper	NA	NA	NA	**11.2**	NA	NA	**191**	**31.3**	**4.7**	**8.3**	**364**	**117**	**115**	**113**
Lead	NA	NA	NA	5 U	NA	NA	**128**	**15**	**3**	5 U	**245**	**137**	**428**	**819**
Mercury	NA	NA	NA	**0.85**	NA	NA	**0.07**	0.02 U	0.02 U	0.02 U	**0.06**	**0.04**	**0.07**	**0.10**
Silver	NA	NA	NA	0.7 U	NA	NA	**0.9**	0.7 U	0.3 U	0.7 U	0.8 U	0.3 U	0.3 U	**1.7**
Zinc	NA	NA	NA	**316**	NA	NA	**965**	**232**	**50.7**	**75**	**1,260**	**1,030**	**934**	**1,020**

TABLE 3
SOLID ANALYTICAL DATA
NORTH LATERAL SOURCE EVALUATION
NORTH BOEING FIELD

	NLS-SURFACE05 RF49K 7/22/2010	NLS-SURFACE06 RG33C 7/29/2010	NLS-SURFACE07 RG33B 7/29/2010	NLS-SURFACE08 RG33A 7/29/2010	NLS-SURFACE09 RG84A 8/2/2010	NLS-SURFACE10 RG84B 8/2/2010	NLS-SURFACE11 RG84C 8/2/2010	NLS-SURFACE12 RG84D 8/2/2010	NLS-SURFACE13 RG84E 8/2/2010	NLS-SURFACE14 RG84F 8/2/2010	NLS-SURFACE15 RG84G 8/2/2010	NLS-SURFACE16 RG84H 8/2/2010
PCBs (mg/kg)												
Method SW8082												
Aroclor 1016	0.77 U	0.79 U	0.033 U	0.031 U	0.2 U	0.031 U	0.065 U	0.070 U	0.033 U	0.03 U	0.032 U	0.032 U
Aroclor 1242	0.77 U	0.79 U	0.033 U	0.031 U	0.2 U	0.031 U	0.065 U	0.070 U	0.033 U	0.03 U	0.032 U	0.032 U
Aroclor 1248	0.77 U	0.79 U	0.033 U	0.031 U	0.52 U	0.094 U	1.3 U	0.26 U	0.12 U	0.03 U	0.22 U	0.032 U
Aroclor 1254	0.77 U	0.79 U	0.033 U	0.031 U	**1.7**	**0.13**	**2.5**	**0.79**	**0.13**	**0.12**	**0.25**	**0.076**
Aroclor 1260	0.77 U	0.79 U	0.033 U	0.031 U	**8.1**	**0.082**	**0.61**	**0.54**	**0.078**	**0.080**	**0.49**	**0.069**
Aroclor 1221	0.77 U	0.79 U	0.033 U	0.031 U	0.2 U	0.031 U	0.065 U	0.070 U	0.033 U	0.03 U	0.032 U	0.032 U
Aroclor 1232	0.77 U	0.79 U	0.033 U	0.031 U	0.2 U	0.031 U	0.065 U	0.070 U	0.033 U	0.03 U	0.032 U	0.032 U
Total PCBs	0.77 U	0.79 U	0.033 U	0.031 U	**9.8**	**0.212**	**3.11**	**1.33**	**0.208**	**0.20**	**0.74**	**0.145**
TOTAL METALS (mg/kg)												
Methods SW6010B/SW7471A												
Arsenic	**5**	**6**	10 U	120 U	50 U	10 U	**80**	**30**	10 U	10 U	30 U	5 U
Cadmium	**7.4**	**1.9**	**1.8**	**7**	**33**	**2.6**	**15.3**	**30**	**11.7**	**5.1**	**17**	**3.1**
Chromium	**51.5**	**28.1**	**35**	**250**	**446**	**51**	**236**	**142**	**93**	**81**	**232**	**66.9**
Copper	**96.6**	**45.8**	**58.9**	**156** J	R	**68.0**	**237**	**299**	**124**	**86.2**	**214**	**193**
Lead	**61**	**39**	**52**	50 U	**170**	**70**	**298**	**560**	**102**	**214**	**120**	**189**
Mercury	**0.11**	**0.04**	**0.04**	0.02 U	**0.16**	**0.03**	**0.27**	**0.59**	**0.10**	**0.26**	**0.08**	**0.11**
Silver	0.3 U	0.3 U	0.7 U	7 U	3 U	0.7 U	0.8 U	2 U	0.8 U	0.7 U	2 U	0.3 U
Zinc	**326**	**315**	**1,210**	**200**	**2,540**	**437**	**2,780**	**2,050**	**1,050**	**482**	**904**	**2,060**

TABLE 3
SOLID ANALYTICAL DATA
NORTH LATERAL SOURCE EVALUATION
NORTH BOEING FIELD

	NLS-SURFACE17 RG84I 8/2/2010	NLS-SURFACE18 RG84J 8/2/2010	NLS-SURFACE19 RG84K 8/2/2010	NLS-SURFACE20 RG84L 8/2/2010	NLS-SURFACE21 RG84M 8/2/2010	NLS-SURFACE22 RG84N 8/2/2010	NLS-SURFACE23 RH18C 8/4/2010
PCBs (mg/kg)							
Method SW8082							
Aroclor 1016	0.031 U	0.031 U	0.031 U	0.03 U	0.03 U	0.031 U	0.80 U
Aroclor 1242	0.031 U	0.031 U	0.031 U	0.03 U	0.03 U	0.031 U	0.80 U
Aroclor 1248	0.11 U	0.031 U	0.031 U	0.062 U	0.03 U	0.031 U	2 U
Aroclor 1254	**0.24**	**0.041**	**0.19**	**0.091**	**0.069**	0.031 U	**4.7**
Aroclor 1260	0.031 U	0.031 U	**0.048**	**0.27**	**0.064**	0.031 U	**6.4**
Aroclor 1221	0.031 U	0.031 U	0.031 U	0.03 U	0.03 U	0.031 U	0.80 U
Aroclor 1232	0.031 U	0.031 U	0.031 U	0.03 U	0.03 U	0.031 U	0.80 U
Total PCBs	**0.24**	**0.041**	**0.238**	**0.361**	**0.133**	0.031 U	**11.1**
TOTAL METALS (mg/kg)							
Methods SW6010B/SW7471A							
Arsenic	5 U	5 U	5 U	10 U	10 U	20 U	NA
Cadmium	**0.6**	**0.7**	**0.8**	**2.6**	**6.3**	1 U	NA
Chromium	**20.1**	**28.5**	**25.6**	**75**	**68**	**38**	NA
Copper	**31.0**	**45.1**	**50.2**	**85.7**	**120**	**24**	NA
Lead	**7**	**71**	**42**	**148**	**78**	**10**	NA
Mercury	**0.58**	**0.03**	**0.26**	**0.11**	**0.04**	0.02 U	NA
Silver	0.3 U	0.3 U	0.3 U	0.7 U	**1.1**	1 U	NA
Zinc	**288**	**2,050**	**453**	**560**	**1,610**	**103**	NA

U = Indicates the compound was undetected at the reported concentration.
J = Indicates the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ = The analyte was not detected in the sample; the reported sample reporting limit is an estimate.
R = The sample results are rejected due to serious deficiencies in the ability to analyze the samples and meet quality control criteria. The presence or absence of the analyte cannot be verified.
NA = Not analyzed.
Bold = Detected compound.

TABLE 4
LIQUID ANALYTICAL DATA
NORTH LATERAL SOURCE EVALUATION
NORTH BOEING FIELD

	NLS-MAT18 RG69A 7/30/2010
PCBs (mg/L)	
Method SW8082	
Aroclor 1016	0.0002 U
Aroclor 1242	0.0002 U
Aroclor 1248	0.0002 U
Aroclor 1254	0.0002 U
Aroclor 1260	0.0002 U
Aroclor 1221	0.0002 U
Aroclor 1232	0.0002 U
Total PCBs	0.0002 U
TOTAL METALS (mg/L)	
Methods SW6010B/SW7470A	
Arsenic	0.05 U
Cadmium	**0.003**
Chromium	0.005 U
Copper	**0.046**
Lead	0.02 U
Mercury	0.0001 U
Silver	**0.012**
Zinc	**0.17**

U = Indicates the compound was undetected at the reported concentration.
Bold = Detected compound.

TABLE 5
SUMMARY OF SOURCE EVALUATION SAMPLE TYPES AND TOTAL PCB RESULTS
NORTH LATERAL SOURCE EVALUATION
SEATTLE, WASHINGTON

Type of Sample	Number of Samples	Number of Samples With No PCBs Detected	Number of Samples With Detected PCBs < 10 mg/kg	Number of Samples With Detected PCBs >10 and < 50 mg/kg	Number of Samples With Detected PCBs > 50 mg/kg
Paint	77	43	19	8	7
Caulk	13	11	0	1	1
Surface Debris	23	5	17	1	0
Concrete	9	6	3	0	0
Asphalt	8	1	7	0	0
Roofing Material	4	3	1	0	0
Wipe Samples	17	17	0	0	0
Other Material	21	15	4	1	1